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Luther Burbank Company

New Creations in
Fruits and Flowers
1893 - 1901

NEW CREATIONS
1893 to 1901

Luther Burbank

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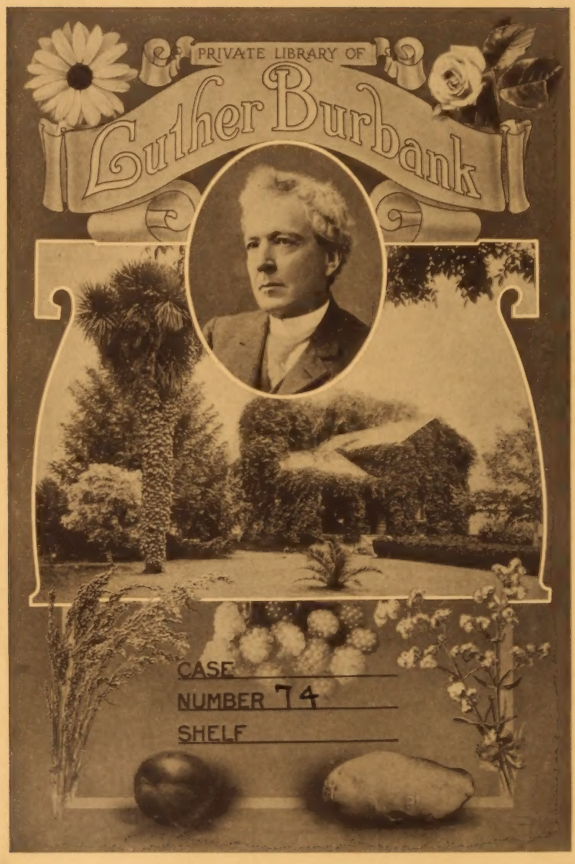


NEW CREATIONS

IN

Fruits and Flowers,

JUNE, 1893.

KEEP THIS CATALOGUE FOR REFERENCE.

You will need it when these Fruits and Flowers become standards of excellence.
Supplementary Lists will be published from time to time.

BURBANK'S EXPERIMENT GROUNDS,

Santa Rosa, California, U. S. A.

Office and Residence:
204 Santa Rosa Avenue.

Cable Address:
"Burbank, Santa Rosa, Cal."

The Fruits and Flowers

mentioned in this list, and to be mentioned in succeeding lists, are more than new in the sense in which the word is generally used; they are new creations, lately produced by scientific combinations of nature's forces, guided by long, carefully conducted, and very expensive biological study. Let not those who read suppose that they were born without labor; they are not foundlings, but are exemplifications of the knowledge that the life-forces of plants may be combined and guided to produce results not imagined by horticulturists who have given the matter little thought.

Limitations once thought to be real have proved to be only apparent barriers; and, as in any of the dark problems of nature, the mental light of many ardent, persevering, faithful workers will make the old paths clear, and boundless new ones will appear by which the life-forces are guided into endless useful and beautful forms.

We are now standing just at the gateway of scientific horticulture, only having taken a few steps in the measureless fields which will stretch out as we advance into the golden sunshine of a more complete knowledge of the forces which are to unfold all the graceful forms of garden beauty, and wealth of fruit and flowers, for the comfort and happiness of Earth's teeming millions.

THE PRICES of all stock mentioned in this list will, unless sold, remain the same until the next crop of fruit or flowers of each variety appears. After still further test of these, under more favorable circumstances, the right is reserved to increase the prices at once of such as may be considered of greater value.

TERMS: Cash, unless by special agreement.

Address all orders to

LUTHER BURBANK,
Santa Rosa,
Sonoma County, Cal.,
U. S. A.

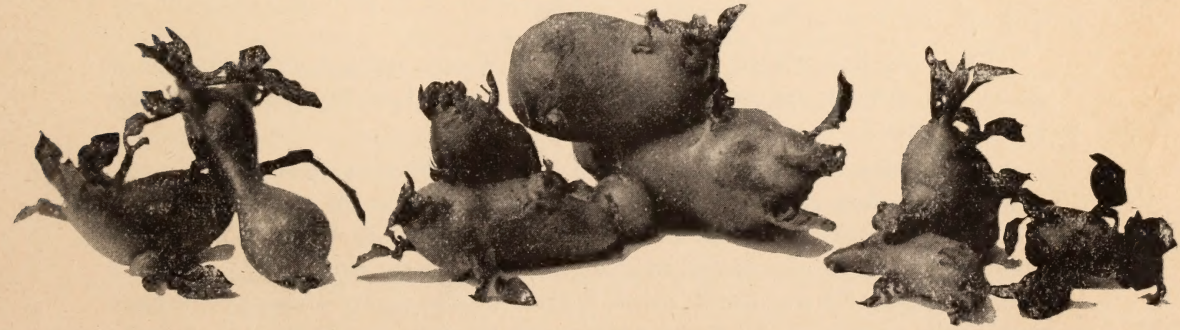
Office and Residence, 204 Santa Rosa Ave.)
Cable Address: "Burbank, Santa Rosa, Cal."

Seedlings of SEKEL PEAR, showing variations.

This Catalogue

is not for public distribution. If editors receive a copy it will give me much pleasure to have my work mentioned in a general way, or descriptions given of any or all the new creations, of course giving due credit; yet I would kindly request that this list be not mentioned as a whole, as I should at once be overwhelmed with an avalanche of correspondence. And there are other considerations which will be fully understood by those who possess rare plants, which have cost more than money—priceless years of time.

I am constantly urged to write regarding the work, and nothing could give me more pleasure, as volumes could be written on the questions brought up by the wonderful display of life-forces in plants, and the startling results obtained by cultivation, crossing, combination and selection; but I am obliged to defer that until some future time, as at present it seems much more important to produce results than to record them or theorize on them. The important steps are all recorded in my field-note books.



AERIAL POTATOES, grown on Burbank Potato vine grafted on Ponderosa Tomato plant. Abundant crop of all sizes, shapes nnd colors. (See also page 52.)

(HYBRID NICOTIANA. See page 47.)

In Presenting You

this catalogue the opportunity occurs for stating that some of the best results of more than twenty years of an active life are portrayed in the pages following. The fruits and flowers here mentioned are the *best of millions* of cross-bred, hybrid and seedling plants, which are now and have been produced at the rate of a million or more a year. Many years must be spent in testing and segregating those which are to become familiar, well-known standards of excellence as so many new fruits and flowers, which have been produced on my grounds, are now known to be.

The time has arrived when purchasers of new and valuable novelties in fruits and flowers are aware that America as well as Europe may furnish some of them.

During the twenty years in which I have been actively engaged in this new work, which is wholly a private enterprise and the most extensive of its kind which exists or has ever existed in this or any other country, many new plants have been produced and introduced. Among the first which acquired a national reputation was the Burbank Potato, which originated in 1873; though now partly supplanted by newer varieties in the Eastern States, it is still the standard on the Pacific Coast, and has long helped to nourish the brain and

brawn of presidents, authors, actors and laborers alike. Since that was produced many eyes have been brightened, many homes made more charming, and many markets and tables more tempting by the fruits and flowers which have been born on my experimental grounds, and there is not a land on this broad earth which has not in some measure been influenced by them.

A love for the work has always been the great incentive through the many years of study, with the added pleasure of knowing how rapidly many of my introductions are becoming popular, among which may be mentioned Sweet Botan, Burbank, Satsuma, and a dozen or more other Plums which are proving to be hardy and productive in northern New England and even at Ontario, Canada. The Sieboldi and Sieboldi cordiformis Walnuts, which have lately proved themselves able to endure a temperature of twenty-five degrees below zero without a trace of injury, the Japan Mammoth Chestnut, Accacia Molissima Florabunda and some of the best Gladiolus, Clematis, Lilies and Roses known, some introduced directly, and some by other firms. The Quinces which I offer are in all respects the greatest advance ever made in improving this fruit, combining the best of every good quality known in the Quince with size, beauty, tenderness and flavor never before attained.

The endless labor bestowed in hybridizing, selecting, testing, etc., is now being more generally recognized, and the fruits and flowers originated by my labors are becoming household words wherever fruits and flowers are admired.

The six hundred thousand hybrid and cross-bred seedling berry plants which I am growing and more than half a million hybrid seedling Lilies are producing profound surprise and admiration, and from the vast chaos of commingled species forms have been created and segregated which will produce great and unsuspected changes in fruit and flower culture.

When I mention, for instance, a Raspberry of largest size which ripens before Strawberries, before Raspberries bloom and before Blackberries show a leaf or bud, some idea may be formed of some of the tremendous changes which will be produced in berry culture. The *best*, after a most exhaustive and careful trial, will be introduced from time to time.

The above does not even outline the work which is being accomplished on my experimental grounds, only having mentioned two or three of many thousand horticultural acquisitions which only a few years ago were thought to be utterly impossible. I am often asked "Why not introduce them yourself?" My time is so wholly occupied in their production that I cannot well attend to their introduction. It is plainly impossible to produce, test and introduce so many of them as my grounds are annually turning out; therefore, I offer all the stock in existence carrying with it the complete control of each new creation at the extremely low prices quoted in this circular.

The sale of these novelties has generally been by correspondence, or more lately by members or agents of the larger firms visiting my grounds to select and purchase such as seemed to offer the greatest results for themselves and

their customers. The enormous amount of correspondence required by these plans has induced me to publish this circular, thus bringing these productions more distinctly before purchasers. This list is sent only to a few hundred prominent American and foreign firms. If the stock and exclusive control of any of these new plants, which will soon be recorded in the horticultural world as standards, is desired, it will be necessary to write early, as no doubt some of them will be sold before these circulars are all distributed.

The names of a large portion of all the prominent floral, seed, and nursery firms of the world have honored my order books for the past eighteen years; and when once recorded appear perennially ever afterwards; and it gives me great pleasure to see the familiar names reappear with each recurring season with larger orders and increasing confidence.

LUTHER BURBANK.

My Grounds Are Not Open to the Public.

June is my reception month for intending purchasers. Nature may then be seen at her work, as everything is in full blast; trees growing, berries ripening, and flowers blooming.

In corresponding please kindly be as concise and brief as possible; a thoughtless question often requires hours of study to present the true light to the inquirer; and, as no one else can answer the myriad questions asked, my correspondence is getting to be a serious burden.

Visitors to my grounds who expect to find long, uniform rows of beautiful plants will not see what they expect; but, instead, will see chaos, utter chaos; a workshop, the birthplace of new vegetable forms. The faithful camera has been invoked to represent a few of them; and horticulturists, botanists, and biologists, among the most eminent in America, who have walked among them, and in whose eyes their forms and colors have been photographed, have always expressed themselves in terms of wonder and surprise; some of them speak further along in these pages.

As an index to the estimation in which my work is held by those who do not see the inside:

A member of one of the largest nursery and floral firms in the United States, who had traveled over three thousand miles to see my grounds, after leaving the railroad station, overtook an old gentleman who had for years worked for me, and inquired of him

if he knew Burbank. He replied: "Course I do. He used to have a big nursery, but sold it out, and now he raises acres and acres of stuff, and every summer has 'em all dug up and burned. I wouldn't give a hundred and fifty dollars for the whole kerboodle." The gentleman from the Atlantic shore pigeon-holed the advice, but continued his way, and before the day passed had selected half a dozen plants, for which he paid six thousand dollars.

"Plant and seed novelties have always been and always will be high in price. This is necessarily so. Originators have never been adequately paid for their productions. The producer of a superior fruit, grain or vegetable should realize a fortune from its sale, for such productions are rare—the work generally of years of study and toil—and they are oftentimes worth millions to the public."—*Rural New Yorker*

"Fruit-growers throughout the world are indebted to you for your indomitable energy and perseverence in producing and introducing so many new and rare fruits. You will hand down to posterity an enviable name and reputation."

D. HAY & SON,
Montpellier Nurseries, Auckland, New Zealand.

"Burbank has the most wonderful collection of plants of new varieties in existence in America or Europe; he has made most marvelous improvements in Blackberries and Raspberries, and a vast number of Lilies, Roses, etc. He is doing a work no one has ever before attempted, and with wonderful results."

H. O. MEAD, in *Fitchburg Mail* (Mass.).

"Luther Burbank, the greatest horticultural experimenter in America, if not in the world." A. CRAWFORD, Cuyahoga Falls, O.

"Luther Burbank is devoting his life and fortune to the improvement of fruits and ornamental plants by seedling cultivation."

E. S. CARMAN, in *Rural New Yorker.*

Burbank's Horticultural Experiments.

"EDITORS PRESS: When you requested me to give you some items regarding what the nurserymen of Sonoma county are doing I little thought what a task I was undertaking. When I struck the establishments of Luther Burbank at Santa Rosa and Sebastopol I found that I had a big job on my hands, and one entirely out of the regular line. I found there the largest and most varied horticultural experiment station on this earth, and I think I would be within the bounds of truth if I said it is as large and doing as much practical good work as all others of its kind on earth combined. This may seem a very wild expression, but we will see as we progress.

"Mr. Burbank began his experimental work in earnest when he was sixteen years of age in his native State of Massachusetts His first marked success was the production of the now well-known Burbank seedling Potato from seed sixteen years ago, and introduced twelve years ago by Jas. J. H. Gregory of Marblehead, Mass., which to-day stands at the head of all Potatoes of its season. To widen his field of labor, and to find a climate in which he could grow anything he wished to without constant war with the elements, he came to California and established himself at Santa Rosa, where, like many others, he had a pretty hard struggle for the first few years; but, being a tireless worker, with great energy and skill, he forced a success, and Fortune was forced to nod her head to him. The commercial part of the nursery business was pushed with great energy and skill, and was soon a marked success. In the mean time his experiments in the line of producing new fruits, flowers and plants from seed by selection, hybridizing, and cross-pollination was receiving his constant care and producing wonderful results. Finding this business growing to a vast size on his hands and exactly suited to his tastes he sold out the commercial part of his nursery business.

"Mr. Burbank is now devoting his whole time to experimentation, and growing a stock of the novelties he has already produced. I can best give a correct idea of this immense establishment by telling what he has done and is doing. In the way of explanation, I will first say, he knows no such word as *cannot*. 'I can't' was never in his dictionary. I mean by this that he has never been bound by the supposed lines of hybridity; by the laws laid down in the books; that the books and former supposed facts of science say that hybrids cannot be obtained between this and that species is no rule or guide for him. *He tries*, and, strangely, many heretofore supposed impossibilities in the line of hybrids between distinct and very distantly related species are now facts, living organisms. In fact, Mr. Burbank is a breaker-up of species; he has proven that *all life* on this earth is akin; that

every form can be made to 'break,' no odds how seemingly obdurate it may seem, and when once 'broken,' it may be carried in any direction at will by time, skill and patience; that hybridity and new forms are the rule under skillful, right manipulation; and that new types may be permanently 'fixed' by the same patient work.

"When I wrote four years ago, after years of a very careful study and experiment with them, that I was convinced that the whole Almond family could be hybridized, the one with the other, I was laughed at and called a *crank* by our leading botanists. What would these men call Burbank? If they called him names he would lead them out into his garden and introduce them personally to just such hybrids, *thousands* of them growing as saucily and vigorously as if their forms dated back to the Garden of Eden, instead of being forms entirely new to the universe, only a month, year, or a few years old.

"In the production of new things Mr. Burbank has set his mark very high. His rule is, that he will not propagate for dissemination any new fruit or flower, tree or shrub unless it is the equal of the best of that form in every particular, and its superior in one or more points.

"In the following partial record of what he has done and is doing, no one but he who has done some work in the line can have any knowledge of the immense labor and skill involved. On the place we see seedlings growing by the thousand of the most difficult kinds to handle, and to give the right conditions in which to germinate the seed, etc.

"Mr. Burbank has during the past few years grown from selected seed, many of them from flowers pollenized by hand with pollen of other varieties of species, the following seedlings from which to select individuals for fruiting to obtain new varieties: * * * *

"I had rather be the originator of Burbank's best Raspberry than be President of the United States. To get at the exact size of this fruit we gathered of it, and all others in fruit in the same soil and culture at the time, just as we would for the market and weighed an ounce of each, and found the following numbers to weigh an ounce: Gregg, as grown here, 28; selected berries, as grown in Ohio by Mr. Albaugh, 15 reported; Hansell, 26; Soughegan, 23; Beebe's Golden, 20; Marlboro, 15; Davison's Thornless, 30; Golden Queen, 18; Brinkle's Orange, 18; Shaffer, 13; *Burbank's new Berry*, 8½ to an ounce.

"The new one, a seedling of Shaffer's Colossal, is much brighter colored, very much finer in flavor, nearly double as large, and—well, to be safe, I will say only four times as productive as it or any other Raspberry. I think I would be safe in saying it will give six times the fruit of any other Raspberry, and safe in saying that one 'hill' or stool of plants will, in the course of a year, produce sixteen times the quantity of fruit of any other Raspberry not having the habit of fruiting in autumn and winter. This habit the new berry has in the greatest degree, not only giving an enormous crop of its immense berries at the usual time, but great masses of fruit through autumn and through winter, if mild.

"Dewberries. Here we again have a wonderful success, especially in the seedlings from the well-known Lucretia Dewberry, heretofore considered by far the best of all, but one could quickly see that it was quite small potatoes as here growing beside its lusty offspring in Mr. B.'s grounds. The new ones were much larger, finer flavored, and best of all, very much more productive, and healthier in foliage.

"Lilies. Here, again, we have wonders. Mr. Burbank has collected and bloomed every known *lilium* that can be induced to flower in this climate. He has found many of this species to hybridize freely. One of then, a native species of this State, seems to be fertile with nearly all other species and to produce strong seeds with their pollen. We may look for some startling new forms in Lilies. * * * * * * * * * * *

"I shall make no comment on this vast work now going on in our midst. I have given it only in part; only the few can appreciate such an undertaking. Mr. Burbank is to-day carrying more than any one man should undertake, but Massachusetts men seldom break down in Sonoma County.

"I believe that I am the only man that has been taken into the inner temple of Mr. Burbank's labor. He doesn't want present notoriety. He *doesn't want visitors;* he has not one second to spare to them; he is the busiest man in the United States; he doesn't want correspondence except on strictly business and scientific matters; *he has nothing for sale*, or to offer for sale, except such things as may be found in his published list of novelties mailed free each autumn to all who wish it."—D. B. WEIR, in *Pacific Rural Press.*

"Luther Burbank was born on a farm in Lancaster, Worcester County, Mass., on March 7, 1849. He received a liberal education, and in the fall of 1875—when a little over twenty-six years old—moved to California and settled at Santa Rosa, in Sonoma County, sixty miles north of San Francisco. Having been from his early years a great lover of fruits and flowers, he bought a tract of land and started in the nursery business. He also began a series of experiments in horticulture, floriculture and pomology, and so deeply interested did he become in these that, about two years ago, he sold the commercial part of his business in order to be in a position to attend more closely to his cherished experiments. He still retains forty-two acres, mostly devoted to experimental purposes. Of this area, twelve acres of rich, black alluvial soil, sixteen feet deep, are situated in the town of Santa Rosa. Ten acres of sea-sand at Sebastopol, eight miles west of that place, give, he finds, the best

results in comparing and testing new plants. The rest of the land is a mixture of sand and clay—mostly sand—which he finds very suitable for testing fruits.

"After repeated experiments Mr. Burbank had almost concluded that the common garden Bean would not cross with the Lima; but at last success crowned his efforts, and he obtained a pod of four beans by fertilizing the old Horticultural Pole Bean with Lima pollen, though the form and color of the variety were not changed. When the cotyledons appeared, however, from one-third to two-thirds of the upper end of each of the Beans bore the markings characteristic of Lima Beans, while the lower parts had the peculiar markings of the Horticultural Pole. The edges of the divisions, like those of uncongenial grafts in trees, were rough and serrated. As the plants grew they were naturally watched with great interest. After a week or more the separation became complete, the upper or Lima parts dropping off, the plants bearing the usual form of Horticultural Poles. Among the curiosities in his grounds are white Beans which almost invariably produce black ones, and *vice versa*. From a cross of two varieties of average growth, some produced vines twenty feet or more in height; while others in the same lot were so dwarfed that all the pods had to grow horizontally, as otherwise they would have pierced the ground.

"Mr. Burbank writes us that the results of some of his experiments are as surprising to himself as they are likely to be to others; but just at present he is not in a position to make them known."—*Rural New Yorker.*

"The sketch only alludes to a few of Mr. Burbank's achievements; others have already been described in the *Rural*, and others will be as their results are attained. Mr. Burbank is fortunately a young man working amid the most favorable conditions of soil and climate, and full of ambition and strength. It is hard to set bounds to work thus favorably circumstanced. It is a matter which will be better understood a generation hence."—*Pacific Rural Press.*

Branch of HYBRID WALNUT.

Nut Trees.

Hybrid Walnut. "Paradox"

Juglans Californica × *Juglans Regia.*

THE first and one of the most interesting and valuable hybrids produced among Walnuts, surpassing all others in rapidity of growth, size of foliage and beauty of form. Budded trees six years of age under the same conditions are fully twice as large, broad and tall as Black Walnuts at ten, or Persian Walnuts at twenty years of age. Twelve to sixteen feet growth per year is not unusual, thus the hybrid grows twice as fast as the combined growth of both its parents. The leaves which are from two feet to a full yard in length are clean cut, glossy, bright green, have a surpassing sweet odor resembling that of fragrant Apples and as powerful and peculiar as that of Roses or Lilies.

The bark is thin, smooth, light gray with marblings of white; the wood is very compact, with lustrous silky grain, taking a beautiful polish, and as the annual layers of growth are an inch or more in thickness and the medullary rays prominent the effect is unique. This hybrid originated in 1888 from a cross made the year before ; like many true hybrids, though blossoming freely every season, it has not borne fruit, therefore cannot be reproduced from seed, but is easily budded or grafted on thrifty young Black Walnuts. See cut on opposite page.

As an ornamental and timber tree it is peerless. Price on application for exclusive control of this variety.

"The foliage of your hybrid Nut between Juglans regia and Californica is remarkably large, shows great vigor and seems to fully substantiate all you have said about it."

H. E. VAN DEMAN,
Pomologist, U. S Dept. of Agriculture.

"You are certainly doing a great work in your hybridizing, and the wonder to me is that you accomplish so much in the midst of business cares."

(Prof.) L. H. BAILEY,
Cornell University, Ithaca, New York.

HYBRID WALNUT. (Life Size.)
See also next page.

JUGLANS CALIFORNICA. Staminate Parent.

JUGLANS NIGRA. Pistillate Parent. (See also page 9.)

HYBRID WALNUT. All Life Size. "Royal" S

Hybrid Walnut. "Royal" S

Juglans Nigra × *Juglans Californica.*

Unlike the hybrid just mentioned this one produces nuts in abundance and of the largest size, as may be seen from the life-size photo-engravings; the quality also is very much superior to that of either parent; the meat, which is very large, and parts more readily from the shell, has none of the disagreeable strong taste of the common American Black Walnut and much more sweetness and character than the California Black Walnut.

In foliage, growth, and general appearance the characteristics of both parents are about equally combined in the hybrid. Bearing nuts when young and abundantly as it does, a promising new field is opened for producing still other variations.

Price on application for partial or exclusive control.

"Contrary to expectations I found the second invoice better than the first. I feel that I have received much more than my money's worth. How it does revive one's faith in poor human nature to meet, now and then, on the great highway of life a man who does not take advantage and is honest and square in action and word." A. P. ROACHE, Watsonville, Cal.

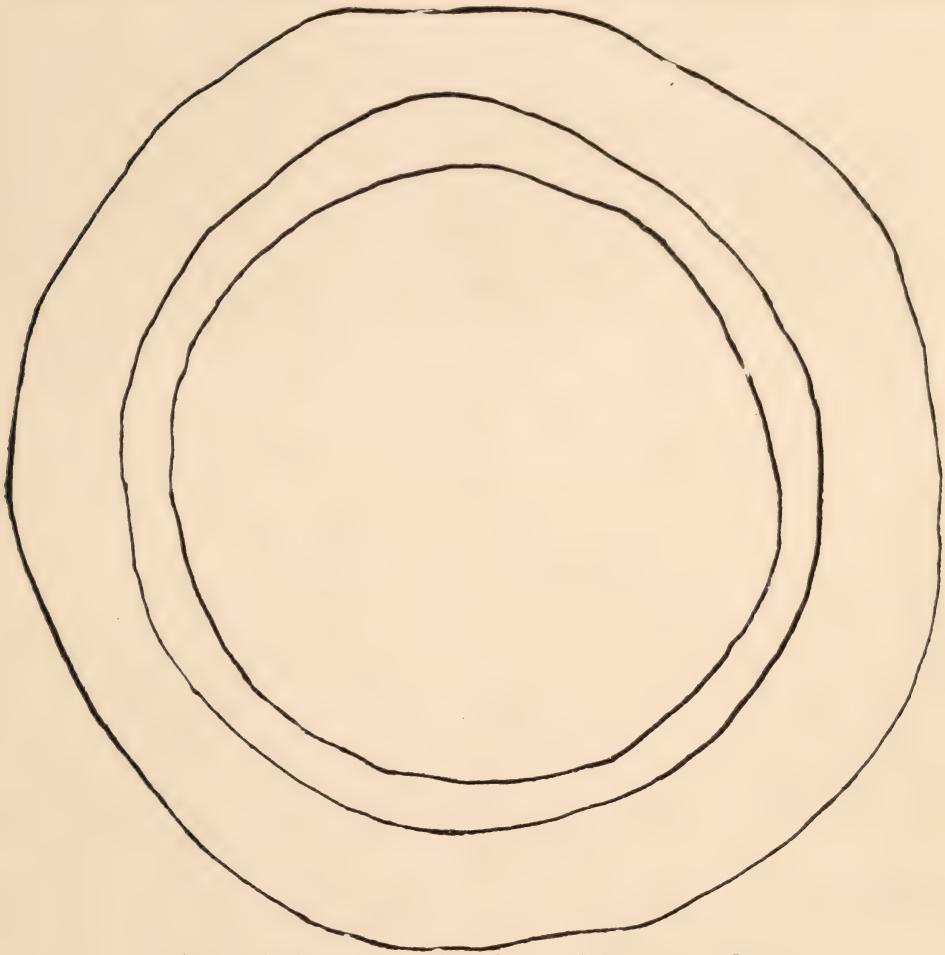
New Japan Mammoth Chestnut.

S.—8940.* "Hale"

The common Japan Mammoth Chestnut has proved to be hardy over a large portion of the United States, and the nuts of the true Mammoth variety average about half a dozen times larger than the average American Chestnut. For many years I grew and fruited seedlings by the thousand for the purpose of producing a better variety. The variations in the size and quality of the nuts, and the productiveness and early bearing of the trees, were remarkable. In one case a burr containing three good-sized, well-filled and well-ripened nuts was produced by a tree in October, which had been grown from a nut planted in April the year before; thus ripe chestnuts were produced from a nut planted only eighteen months before. I now offer the best one of more than ten thousand seedlings, a tree which each season bears all it can hold of fat, glossy nuts of the very largest size and as sweet as the American Chestnut.

Stock on hand: one large tree. Price for stock and exclusive control, $300.

* The names and numbers under which some of these plants are described are temporary.



Outlines of the first, second and third crops of VAN DEMAN QUINCE.

Quinces.

New Quince.

"Van Deman."

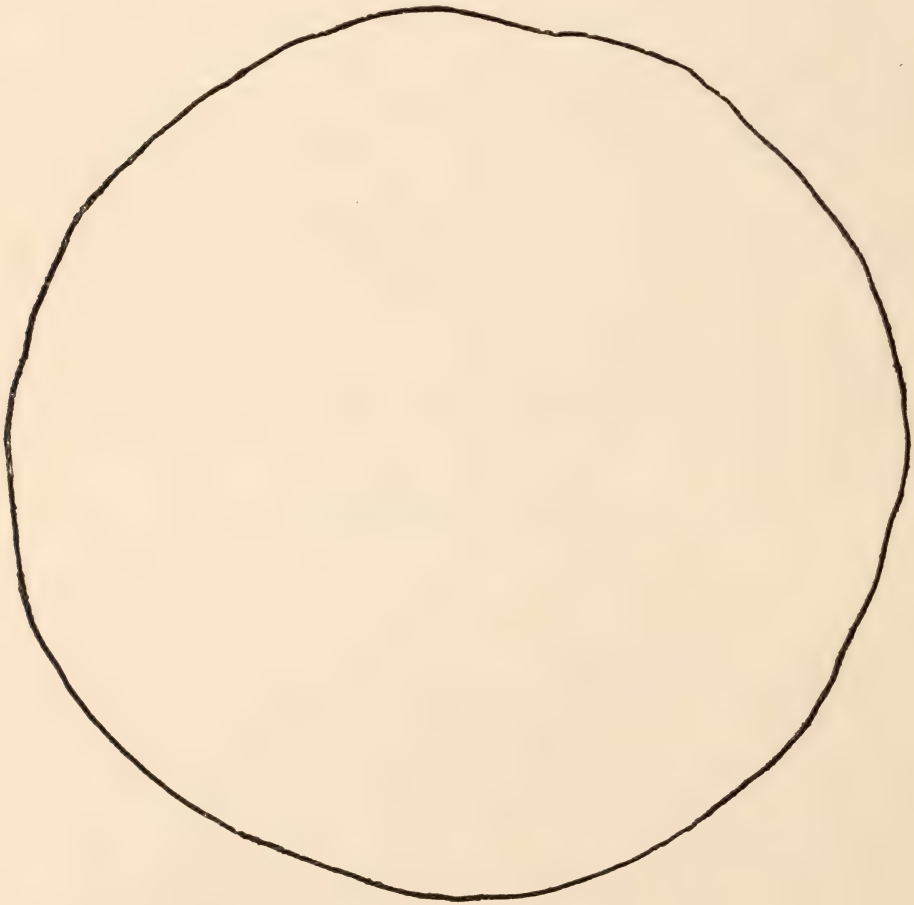
THIS, among others of my seedlings, received the Wilder Medal at the meeting of the American Pomological Society at Washington, D. C., in October, 1891, and was so generally admired, and has proved to be so valuable, that Prof. H. E. Van Deman has consented to allow me to name it for him. I sincerely hope it will prove to be as valuable and as useful as a fruit as Prof. Van Deman has proved himself to be in his position as Pomologist. If so, I shall be satisfied; for I know of no one who is doing more valuable, efficient and faithful work than the chief of the Pomological Division of the Department of Agriculture.

The Portugal Quince has always been considered the best flavored and most tender of all known quinces, but a shy bearer. The Van Deman, which is a seedling of the Portugal, is not a shy bearer, but will, without doubt, produce more big, fine-flavored golden fruit than any other.

The outlines show the forms and sizes of the *three crops*. The first or main crop is represented by the outside line, and ripens here September 20th to 25th, two weeks or more before Orange and Meech's Prolific, and often weighing, even when grown on small trees, from twenty-five to twenty-six ounces each. The middle line represents the second crop, which ripens November 1st, and the inside line the third crop, which ripens December 1st. All are of the most superior flavor, texture and quality for all the purposes for which quinces are used, and in addition are as tender and good as apples when *baked*, and bake as quickly too, and, when *dried* or *canned*, retain all the Quince flavor so much admired. This opens a new field, as the demand for these new Quinces, when dried or canned, will increase rapidly as they become known.

I have growing on my grounds for comparison trees of Angers, Orange, Pear, Reas' Mammoth, Meech's Prolific, Champion, West's Mammoth and others, and not one of them has ever borne any fruit comparable with the Van Deman in size, quality or beauty.

Stock on hand: Original tree, some five hundred six-foot grafted trees, and about twenty thousand cuttings. Price, $800.



Outline of average "Santa Rosa" Quince.

New Quince.

"Santa Rosa."

This Quince is remarkable for its great size, exquisite beauty of form, polished light lemon yellow, almost white skin, productiveness, tenderness of flesh, delicious flavor and diminutive core. It is a seedling of Reas' Mammoth, and, like it, ripens in September. The fruit is so fine-grained and tender, and free from the harsh acid of the old Quinces, that it is as good as some popular Apples for eating raw, and fully equal to the best of Apples or Pears when baked, stewed or canned, and makes a superior light-colored dried fruit. The fruit of the "Santa Rosa" will cook tender in five minutes.

The tree is unusually vigorous, and resembles Reas' Mammoth in form and growth, but, unlike it, grows readily from cuttings.

Stock on hand: Original tree, fifty grafted trees, bearing size, and about one thousand rooted cuttings. Price, $800.

An Important Improvement.

"Heretofore the Quince has been considered unfit for use until it has passed under the hand of the good housewife. But Mr. Luther Burbank of Santa Rosa, California, who has spent nearly a lifetime in crossing and hybridizing fruits, flowers, etc., has produced some choice varieties altogether in advance of the older sorts. Two of these are said to be without the usual downy covering, and so tender and agreeable that they can be eaten out of hand like a fine apple. This is one of the most important improvements among fruits in modern times.

"The principle of variation implanted in the constitution of fruits generally, and to which we are indebted for all the finest cultivated varieties, seems less pronounced in the Quince than in most others. This has doubtless been discouraging to persons inclined to experiment by planting the seeds in order to produce new sorts, and, as a consequence, there are but few varieties of the Quince."—*New York Examiner.*

"Bronze medals were given to Luther Burbank of Santa Rosa, Cal., for a magnificent collection of seedling Quinces, which could not well be surpassed in size, form, uniform smoothness, color or general appearance."—*Rural New Yorker's* report of the meeting of the American Pomological Society at Washington, D. C.

In the annual report of the Chief of the Division of Pomology, United States Department of Agriculture of 1891, the following description of two of my Quinces is given. As the fruit lists are now so large, the Division of Pomology is very careful not to recommend anything unless thoroughly worthy, and in any case their judgment is without bias:

VAN DEMAN.—"Oval truncate; size, large; greenish yellow; flavor, subacid, mild; quality, best. This variety is one of the very best in every respect that I have ever examined, and the tree is reported as exceedingly thrifty and productive. After several years' trial, Mr. Burbank considers it the best of his hundreds of new seedlings, and has named it as above."

SANTA ROSA.—"Another very choice new Quince. It is very highly colored, and has the peculiar Quince flavor strongly developed, and yet can be eaten raw like an Apple. Free from fuzziness."

"Concerning the Quinces you sent for the meeting of the American Pomological Society, you no doubt have heard of the attention they attracted and the admiration expressed both by the vistors and by the Committee on Awards. The Rubus leaves puzzled everyone, and were a revelation to many who were unaware that so much had been accomplished."

W. A. TAYLOR,
Assistant Pomologist U. S. Department of Agriculture.

"I think these are the two best Quinces I have ever had the pleasure of examining, and feel sure that they will meet with high commendations when generally tested."

H. E. VAN DEMAN,
Pomologist, U. S. Department of Agriculture.

New Japan Quince.

"Alpha."

Pyrus Maulei and Pyrus Maulei superba have been recommended as the best of the Japan Quinces for fruit.

From many thousand seedlings one has been obtained which produces large, handsome, light, crimson blossoms, and extremely large, orange-like, waxy, yellow fruits in the greatest profusion. It is one of the handsomest of all fruits, and always attracts attention by its large size, peculiar form, golden color and exquisite fragrance.

The quality is much superior to other Japan Quinces, and will be found useful everywhere—North, South, East and West—owing to its hardy vigor, productiveness and value for jelly-making. Stock: One large original bush. Price, $300.

New Flowering Quince.

"Dazzle."

Flowers of the most dazzling crimson, *over two inches in diameter*, of unusual substance, and growing in great clusters. The plant has a fine gracefully drooping habit and vigorous growth. Stock: One very large bush. Price, $300.

Plums and Prunes.

Cross-bred Prune.

A. P.—90. "Giant" S

Petite d'Agen × *Hungarian.*

THE Petite d'Agen, French Prune, or California Prune as it is often called, is well known to be the most important fruit grown in California. During the spring of 1885 the Petite d'Agen was selected as the parent tree, and many thousand blossoms were pollenated from the Hungarian Prune, the largest, handsomest and most productive Prune then known.

At the meeting of the California State Horticultural Society in August, 1888, I had the pleasure of exhibiting seventy varieties of the best of these cross-bred seedlings. The purchaser of the commercial part of my nurseries, being ignorant of their value, destroyed some sixty or more of them, but several of the most promising had been grafted into another tree, and among them the subject of this sketch, which seems to be a very well-balanced cross between the two Prunes. The fruit, which averages one and one-half to two ounces each, is sweeter and of finer texture than the Hungarian Prune, and larger (possibly the largest Prune or Plum known); but not as firm and sugary as the Petite d'Agen. It is well distributed along the sturdy branches, so that the immense load is carried without danger of breaking the trees. Its handsome

appearance, unequaled size and rare keeping qualities will, without doubt, place it at once among or above the best market and shipping prunes.

Stock on hand: Eight bearing trees and numerous grafts. Price for stock and control, $1,500.

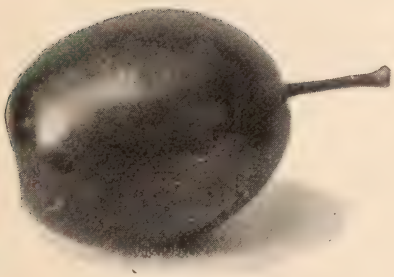
"The California State Horticultural Society met Friday, August 31st, at the rooms of the State Board of Horticulture. The meeting was rendered specially interesting by exhibits of Prune seedlings by Luther Burbank. There were seedlings of the French Prune of which he has ripened over seventy this year. There was an almost infinite variety in form, size and color—golden, yellow, almost to black; size from a pigeon's egg to a large hen's egg; various oblong forms to nearly round. The secretary said he had kept the samples in a close box for about three weeks, and evidently some of the seedlings had fine keeping qualities."—*Pacific Rural Press.*

Also described in Prof. E. J. Wickson's "California Fruits, and How to Grow Them," the accepted authority, and the best, most thoroughly practical, complete and exact work published, and one which every fruit-grower should have.

"The cross between Pond's seedling and Petite I find a beautiful Prune of excellent flavor and should be profitable for shipping. I shall be pleased if, when you have trees to dispose of, you would put me on your list of those to be notified, as I shall want some of them.

A. T. HATCH,
"Flood Building, San Francisco, California."

(Probably the largest fruit-grower on earth.)



PETITE PRUNE.

CROSS-BRED PRUNE A. P.—318.

Cross-bred Prune.

A. P.—318. Splendor (Stark Bros)

Another magnificent Prune raised from a seed of the Prune d'Agen: pollen of Hungarian Prune. The trees are perfection in growth and productiveness, and though having somewhat the general appearance of the Petite d'Agen yet the branches are more sturdy, and with very little pruning naturally assume a uniform appearance much superior to either parent.

The form, size, and general appearance of the fruit is well shown in the accompanying photograph; the color is like Petite d'Agen, and it has the same firm, rich, sugary flesh, ripens a full week earlier, and being three or four times larger and a perfect natural *freestone* will perhaps supplant that grand, long known, and extensively grown variety, and change the whole Prune industry of the world. As a combined drying, shipping, market and table variety it has no rival.

Stock on hand: Three large trees, ten small ones, and numerous grafts. Price of all stock and control, $3,000; half of stock and half control, $2,000.

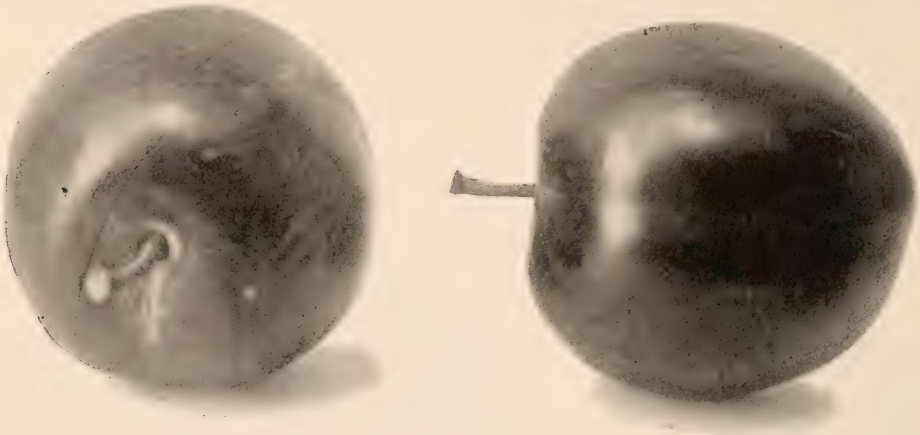
"We write to express our great satisfaction at the Burbank Plum, which we have now tested. It is a most delicious flavor, partaking of the Nectarine and Apricot, and we say, without hesitation, the best of all these valuable Plums. With us the fruit is like a handsome, highly colored Nectarine.

"In conclusion, we express most sincere thanks for the many valuable things that you have sent, and for their reliable character. Everything from you we can depend upon. We have found your opinion about fruits to be genuine, and a long way superior to any other person or firm which we have had the pleasure of dealing or corresponding with."

D. HAY & SON, Auckland, New Zealand.

"Three years ago last February we got Burbank Plum grafts from you. To-day there are Plums on the trees that measure six inches in circumference; they are just beginning to color, so will grow some yet. Not one has ever been touched by the curculio. In short, they seem to be perfect Plums in every particular.

"We write all this just to express our appreciation of what you are doing for horticulture." A. M. RAMSEY & SON, Mahomet, Texas.



PURPLE-LEAVED HYBRID PLUM K. P.—193.

Purple-leaved Hybrid Plum.

K. P.—193.

This might be called the "Purple Leaved Kelsey," as it was grown from a Kelsey seed, but the wood, bark, leaves, flowers and fruit all show the most unmistakable marks of Pissardi.

The photograph shows the form and size of the fruit, which ripens after its purple-leaved parent and several weeks before Kelsey; it is dark purple with numerous white dots and a thin blue bloom; flesh reddish purple throughout; firm, subacid, good; much larger and better than Pissardi, but not as good as Kelsey, and the treees are not as productive. Its great value lies in its large purple leaves, which hold their color all summer, and its handsome wine-glass form. Being a much better grower and handsomer in form, and producing much larger, finer fruit than its purple-leaved parent, it will, no doubt, prove to be a very acceptable addition to lawns and parks as well as orchards.

Stock: Four large trees; price, $300.

"There is no doubt about the leaves of this seedling resembling those of Pissardi, and the fruit seems to resemble it considerably, although of very much better quality."

H. E. VAN DEMAN, Pomologist, U. S. Dept. of Agriculture.

"Your valued favor was read with much interest, especially in regard to the new seedling varieties of Japanese Plums, which we shall certainly order as soon as offered. Burbank is excellent in every respect, and Satsuma was a wonderful sight when ripe. We had fully one hundred bushels of the various varieties, and can therefore speak as to their value." P. J. BERCKMANS, Augusta, Ga.

"ROBINSON" PLUM.

HYBRID PLUM "GOLDEN." (Both Life Size.)

Hybrid Plum.

"Golden." Gold (Stark Bros)

Robinson Chickasaw × Sweet Botan Japan.

One of the most remarkable hybrid fruits ever produced; raised from a seed of the Robinson, yet is four times larger, and combines the delicious juicy sweetness of the Sweet Botan and the form and colorings of the Robinson. It ripens along through five or six weeks, and if picked before ripe will ripen and color up perfectly, and will keep sound a week or two when fully ripe

The cut which shows the comparative sizes of Golden and Robinson also shows the form of the hybrid. The color is clear, semi-transparent, light golden yellow, which, later is nearly overspread with a hazy carmine blush, making it probably the handsomest Plum in existence. I have never seen a Plum tree which perfects so much fruit, and has it so evenly distributed as this one.

The branches, blossoms, and leaves somewhat resemble the Robinson on a larger scale, but the growth is as strong and more like the Japanese varieties. Should be hardy throughout most of the United States.

Stock on hand: One original tree, twelve small ones, and some grafts in old trees. Price for stock and control, $3,000.

IMPROVED PLUMS.—"Under date of August 27th we have again from Mr. Luther Burbank some more specimens of a newly improved Plum which he calls 'Golden.' Mr. Burbank states that it was raised by a cross of the Miner with the Japan variety known as Sweet Botan. The Miner weighs half an ounce, while the new variety weighs two ounces. It is one of the most beautiful Plums that we have ever seen, looking far more like an old-time Nectarine than a Plum. Mr. Burbank deserves great credit for the successful energy he is pursuing in improving this class of fruit."—*Meehan's Monthly.*

"The Plums came in perfect condition. They are a great surprise in shape, color and flavor. We never saw a more beautiful Plum. We congratulate you on this great success.
ELLWANGER & BARRY, Rochester, New York.

"The fruit received in fine condition, and in quality all that could be desired. If its productiveness equals the quality it must be a great acquisition to the list of Plums."
S. D. WILLARD, Geneva, N. Y.

"The two samples of 'Golden' Plum and the specimen leaves from your various hybrids were duly received.

The 'Golden' is certainly a promising Plum, and this evidence of its long season of ripening adds to its value, as it will not have to be marketed all at once."
W. A. TAYLOR, Acting Pomologist, U. S. Dept. of Agriculture.

"The Plums came to-day firm and good. We are more than ever interested in your work, and congratulate you on your success.
CHAS. A. GREEN, Rochester, New York.

CROSS-BRED JAPAN PLUM "DELAWARE." (Life Size.)

Cross-bred Japan Plum.

"Delaware." John Lewis Childs

Everybody appreciates the wonderful combination of flavors so charmingly put up, combining as it does in its rich, purplish, wine-colored flesh and abundant juices the flavors of apricot, plum, grape, nectarine and watermelon, and some other new and undefinable ones, The size and shape of the fruit is well shown in the cut; color dark purplish bronze with a white bloom. *Par excellence* the fruit for home use. The trees are semi-dwarf, and productive almost to a fault. The fruit is larger and finer when grown by top-grafting into large Peach or Plum trees. Ripens here first of August. Seedling of Satsuma crossed with Kelsey.

Stock on hand: One small tree and a few grafts. Price, $500.

"Prof. L. H. Bailey in speaking recently of the Japan Plums as a class said, 'I consider this the most important type of fruit which has been introduced within the past twenty-five years.'

"The Burbank is so fine that we have faith in anything you recommend."

A. M. RAMSEY & SON,
Mahomet, Texas.

Seedling Japan Plum.

"Shipper." John Lewis Childs

Remarkable for its firm flesh and superior shipping qualities. Fruit, oval, light red with a white bloom; firm and sweet and yet juicy. The tree is a sturdy, handsome, upright but moderate grower and requires very little attention. The fruit can be handled like Apples, and will keep a long time. Seedling of Satsuma.

Stock on hand: One small tree. Price for stock and control, $500.

"I am glad to know that you are so wide awake as to the necessity of being sure that we *know* that a Plum is Japanese or not. You have rare advantages for testing so many kinds of fruit from that interesting country."

H. E. VAN DEMAN, Pomologist, U. S. Dept. of Agriculture.

CROSS-BRED PLUM J.—3972. (Life Size.)

Cross-bred Plum.

J.—3972. Hale (J.H.)

Kelsey × *Satsuma.*

A remarkably handsome, large, yellow Plum, marbled with green and having a red cheek; closely resembling a very large Reine Claude; light yellow, very sweet, and abundantly juicy flesh.

The tree is an unusually strong growing variety, with light green bark and broad shining leaves, and is as productive as any one could wish. The fruit grows so thick as to hide the older branches, and yet it all comes to perfection. Some of the branches show a slight tendency to be thorny.

Stock: Original tree and several strong grafts. Price, $300.

Luther Burbank's New Plums.

"Notable results are already accruing from the wonderfully extensive and devoted efforts which have been put forth for many years by Luther Burbank of Santa Rosa. He has produced during the last twenty-five years something like twenty million hybrid and cross-bred seedling plants, and the endless labor and outlay bestowed in hybridizing, selecting, testing, etc., is now being more generally recognized, and some of the fruits and flowers originated by his labors are becoming household words wherever fruits and flowers are admired. We have from time to time alluded to this important work in the *Rural*, and we are pleased now to mention three new Plums of which early borne samples are sent us.

"The first is a seedling grown from seed of Kelsey Japan Plum crossed with pollen from Satsuma. It is a wonderfully fine fruit in texture of skin and flesh, and in fact is free from coarseness of any kind. It carries the rich dark color of the Satsuma, and in its upper portions shows the symmetry of that variety. Its lower half discloses the influence of the Kelsey upon its outline, for it has inclination to draw to a point, though to a much less degree than in the Kelsey. The flesh has the dark red of the Satsuma, somewhat lightened with the yellow of the Kelsey.. Its flavor is characteristic and delightful, and suggests Watermelon, Grape, Plum and Apricot as its presence invades the palate. The pit is smooth, shapely and of medium size. The fruit seems to us to reflect in a notable degree the good qualities of both its parents.

"Mr. Burbank sends us also two other cross-bred seedlings. One, designated as 'J,' is a very handsome yellow with slight reddish clouding on the sun side. It is also built upon the Kelsey crossed in this case with the Burbank. It has rather more of the Kelsey shape than the fruit cross with Satsuma above described, but it is not nearly so uneven as the Kelsey. It has clear yellow flesh and a flood of juice of very mild, agreeable flavor. It seems to be a persistent clingstone.

"Another new variety is marked '2,' and is a cross of Kelsey with Satsuma pollen. It gives no intimation of the Kelsey shape, but almost fully reflects the Satsuma form. It is a dark color, plentifully studded with light yellow dots. It has a most beautiful deep red and almost translucent flesh, suggesting a mass of currant jelly. It is juicy, and has a distinctly vinous flavor. The variety has points which will command wide attention.

"These fruits are all good medium size, but smaller than good samples of either of their parent varieties. It is altogether probable that they will run larger when better grown. Mr. Burbank, of course, fruits his seedlings in close rows first to determine which are worthy of further trial, and these specimens came from plants grown almost as thick as a hedgerow. We shall watch with interest to see what they will do when budded into a good stock as Mr. Burbank will undoubtedly proceed to do.

"The production of a few such varieties as the above should prove full consolation and reward for the labor Mr. Burbank puts forth. Of course, to get one such fruiting variety he has to fruit hundreds, all the rest of which are probably altogether worthless through reversion to the wild type. But this is the price which the devoted originator of new varieties has to pay for his victories."—*Pacific Rural Press.*

"The Plums arrived in excellent condition. We think very highly of them."

THOMAS MEEHAN & SONS,
Philadelphia, Penn.

Hybrid Plum.

"Juicy." John Lewis Childs

This Plum, like "Golden," is a seedling of Robinson (Chickasaw) and Botan (Japan), and has been well tested three years. The tree would perhaps resemble the Robinson the most in wood and leaves but for its very strong rapid growth; in this respect surpassing either parent, and rarely equaled by any Plum tree.

The fruit is about three times larger than the Robinson, and nearly as large as the Botan, of the same shape, but of a light yellow color; very juicy and having the delicious sweetness of the Botan mingled with the acid of the Robinson.

Stock on hand: Original tree, one large tree grafted from it, and several small ones. Price, $500.

"The other Plum is undoubtedly one of the very best in quality of its class. Its color is now perfect, and much resembles the 'Wild Goose.'"

H. E. VAN DEMAN, Pomologist, U. S. Dept. of Agriculture.

"The Burbank Plum is now ripe (January 20th). We grow them larger than you describe. We measured an average fruit and found it seven inches by six and three-fourths, and splendid flavor; and consider it the best Plum in cultivation. You deserve universal thanks for what you have done in raising so many valuable new fruits."

D. HAY & SON, Montpellier Nurseries, Auckland, New Zealand.

CROSS-BRED PLUM "PERFECTION." (Life Size.)

Cross-bred Plum.

"Perfection." Wickson S

Kelsey × Burbank.

Among the many thousand Japan Plums which I have fruited, this one, so far, stands prëeminent in its rare combination of good qualities.

The tree grows in vase form, sturdy and upright, yet as gracefully branching as could be desired, and is productive almost to a fault. The fruit, which is well shown in the photo-engraving, is evenly distributed all over the tree, and from the time it is half grown until a few days before ripening is of a pearly white color, but all at once soft pink shadings creep over it, and in a few days it has changed to a glowing carmine with a heavy white bloom; the stone is very small and the flesh is of fine texture, firm, sugary and delicious, and will keep two weeks or more after ripening, or can be picked when hard and white and will color and ripen almost as well as if left on the tree.

Stock on hand: Original tree, six good-sized young trees and fifty grafts. Price, for stock and control, $2,000.

HYBRID PLUMS.—"Mr. Luther Burbank, of Santa Rosa, Cal., sends specimens of Hybrid Plums, which are certainly remarkable in this—that they came in a small box by mail during the torrid weather of the early part of August, wrapped simply in cotton batting, and were as sound and fresh as if just taken from the tree. Certainly they are, in the language of the markets, admirable carriers.

"They are cross-bred Japan Plums. Though the first year of bearing, and therefore smaller than they will be next year, according to usual experience, they are six inches in circumference. One of them looks just like a very large Reine Claude de Bavay—the finest of all the green gages. The other is a dark purple, and of a piquant, agreeable flavor peculiarly its own. Another, the 'Perfection,' is superior to most of the Plums of the old world stock, both in size and flavor."—*Meehan's Monthly.*

"Specimen of 'Perfection' Plum duly received. I have had them modeled, and have good descriptions now made of them. This is certainly a handsome Plum, and of good quality, also." W. A. TAYLOR, Asst. Pomologist, U. S. Dept. of Agriculture.

"Your new cross-bred Plums, 'Perfection,' were received in as good order as if fresh picked from the tree. I can only say it is excellent, and would seem to be the best of all with Japanese blood. S. D. WILLARD, Geneva, N. Y.

Hybrid Plum.

A.—248. "America" (Stark Bros)

Botan × Robinson.

One of the earliest Plums, ripening here early in July. The fruit, which in a hedgerow of seedlings averages three and three-fourths by four and a half inches in circumference, is oval, heart-shaped, dark crimson, and nearly covered with light yellow dots. Flesh, yellow, juicy with a combination of the flavors of both species.

In foliage, growth and general appearance of the tree, and in color and dotting of the fruit the Robinson is very prominent, but the fruit more resembles the Botan in form, size flavor and time of ripening, being some four weeks earlier than Robinson.

Stock: Original tree and some strong bearing grafts. Price, $400.

"All of the Plums of which you have sent us samples are certainly remarkably fine. I am well acquainted with your history and your life-work, as are many others, and I realize the fact farther that to very few parties who have brought out, as you have, so many new and valuable varieties is given just compensation for their work. I would here add the Plums sent out by you under the name of Burbank as well as the true Sweet Botan are a remarkable success on my grounds." S. D. WILLIARD, Geneva, New York.

"Your Plums reached us in first-class condition. They are splendid specimens of an improved race. You deserve great credit for the successful energy displayed in these useful lines." THOMAS MEEHAN & SONS, Germantown, Penn.

"I think I never ate a better Plum in quality than the round yellow one that you say is a seedling of the Peach Plum." H. E. VAN DEMAN, Pomologist.

Hybrid and Cross-bred Berries.

EVERYBODY appreciates delicious berries, but probably not one person in each million has the faintest idea of the labor and expense of crossing, raising and testing *a million new kinds of berries* as the writer has done, and selecting with untiring diligence those which are to become standards of excellence as the years roll by.

Nothing like the work which I am doing has anywhere ever been attempted even by Government aid; and no one will question the claim that I have made more and greater improvements in Blackberries and Raspberries during the last fourteen years than have otherwise been made during all the past eighteen centuries.

A list of some of the *species* which have been incorporated to produce these hybrids is given below; the combinations are endless; the results are startling and as surprising to myself as they will be to others when known.

Rubus Articus,
Rubus Australis,
Rubus Balfourianus,
Rubus biflorus,
Rubus canadensis,
Rubus capensis,
Rubus cratœgifolius,
Rubus cuneifolius,
Rubus dalibarda,
Rubus deliciosus,
Rubus flavus,
Rubus fruticosus,
Rubus idæus,
Rubus incisus,
Rubus laciniatus,
Rubus leucodermis,
Rubus leucostachys,
Rubus Macrari,
Rubus Menziezi,
Rubus neglectus,
Rubus nutkanus,
Rubus occidentalis,
Rubus odoratus,
Rubus palmata,
Rubus parvifolius,
Rubus pedatus,
Rubus phœnicolasius,
Rubus rosæfolius,
Rubus spectabilis,
Rubus strigosus,
Rubus suberectus,
Rubus thyrsoides,
Rubus triflorus,
Rubus trivialis,
Rubus villosus,
Rubus vitifolius,
Rubus sp. Himalayas.

Hybridizing Distinct Species.

"Mr. Luther Burbank sent recently a large series of photographs of the leaves of different individuals—hybrids between different species, Blackberries, Dewberries and Raspberries. It is a remarkable variarion. Some have leaves as finely divided as ferns; others are palmate, like the Horse Chestnut; others have but a single leaf. It would puzzle the scientific botanist to know how to distinguish a variety from a species.

"Mr. Burbank is doing an excellent work, not only in the line of scientific botany but also for the practical fruit-grower."—*Meehan's Monthly.*

Japanese Golden Mayberry. John Lewis Childs.

Improved Rubus Palmatus.

The earliest Raspberry ever known. The berries are of a golden straw color, as large as Cuthbert, and ripen here in April, *a month before Hansell*, before Strawberries, and before the earliest of the standard Raspberries of the past have hardly awakened from their winter rest. The bushes are distinct from all others, growing like trees six to eight feet high, with spreading tops, and all along the branches large, white, bell-shaped blossoms are pendant, which are soon followed by the great, sweet, glossy, golden, semi-translucent berries.

The plants do not bear as heavy when very young as some others, but, when well established, will surprise one with their abundance of fruit.

The history of this variety is as follows: Some ten years ago I requested my collector in Japan to hunt up the best wild Raspberries, Blackberries and Strawberries that could be found. Several curious species were received the next season, and among them a red and also a dingy yellow unproductive variety of Rubus palmatus (described by botanists and collectors as being unproductive and having an insignificant berry). One of these plants, though bearing only a few of the most worthless, tasteless, dingy yellow berries I have ever seen, was selected solely on account of its unusual earliness, to cross with Cuthbert

and other well-known Raspberries. Among the seedlings raised from this plant was this one, and, though no signs of the Cuthbert appears, yet it can hardly be doubted that Cuthbert pollen has affected some of the wonderful improvements to be seen in this new variety. Stock on hand: Six very large clusters and forty-eight strong young suckers. Price, $800.

"It is quite remarkable that the small-fruited Japanese species, Rubus palmatus, should produce a variety so large as the one you sent, and it seems also to be remarkably early."

H. E. VAN DEMAN,
Pomologist, U. S. Department of Agriculture.

"In quality these berries are excellent, the flavor being sweet, without any unplesant acid, and the seeds are very small and tender. It holds its color better than any other yellow Raspberry that I have seen. How is it in regard to productiveness?"

W. A. TAYLOR,
Assistant Pomologist, U. S. Department of Agriculture.

HYBRID BERRY. "PRIMUS."

Hybrid Berry.

"Primus."

Rubus ursinus (Western Dewberry) X Rubus cratœgifolius (Siberian Raspberry). This was one of my first successes in Raspberry-Blackberry hybrids, and has been fully tested here for several seasons; it is one of the most productive berries known, and is larger and more regular in size and shape than the standard varieties heretofore grown. The flavor is unique; nothing like it has ever before appeared; all pronounce it superior when cooked, and most

people like it raw, while some claim it is the "best berry they ever tasted." It cannot be expected to be as sugary as those which ripen in warm weather, but above all is its earliness, for it *ripens* its main crop with Strawberries, and long before most of the standard, well-known kinds of Raspberries and Blackberries commence to *bloom*, and also bears more or less berries all summer. It will probably be classed as a Blackberry, as it is of a dark Mulberry-black color when ripe. The plant is a wonder for health and vigor.

Stock on hand: One original bush (very large) four large plants, twenty-one strong medium-sized ones. Price, $600.

Hybridizing the Raspberry and Blackberry.

"It is only a short time since it was supposed to be possible to cross the Raspberry with the Blackberry; and ever since Luther Burbank, of California, had, in 1883, succeeded in crossing the Red Antwerp Raspberry with the Pacific Coast Dewberry (Rubus ursinus) it has often been stated that no practical results had been obtained.

"The middle figure in the cut on opposite page shows a leaf and some fruit of one of Mr. Burbank's later hybrids which bears large and perfect fruit in the greatest abundance, ripening in California with the earliest Strawberries, and before our well-known standard Raspberries and Blackberries are in bloom.

"A leaf and fruit of the California Dewberry (the pistillate parent) is shown at the left; and the staminate parent, the Siberian Raspberry (Rubus cratægifolius), at the right. All are about one-third natural size. Curiously all the other seedlings from the same cross, though varying greatly in foliage and growth between the two parents, were barren, though most of them bloomed abundantly, the blossoms of many appearing to be perfect.

"It is also remarkable that the hybrid should ripen its fruit several weeks before either of its parents, and to excel them much in productiveness and size of fruit, though retaining the general appearance and combined flavors of both. The blossoms are large and handsome, and are followed in an incredibly short time with the large, glossy black fruit."—*Meehan's Monthly.*

"The contents of your letter are of exceedingly great interest to me, and I trust we may be able to keep track of the important work which you are doing. This one new hybrid which you have originated between the wild Dewberry of your State and the Siberian Raspberry may prove to be a great blessing to horticulture, and no doubt you have other things of equal value; but, as you have been doing, you will have to work, watch and wait."

H. E. VAN DEMAN, Pomologist, U. S. Dept. of Agriculture.

"Although your new berry is a hybrid, I presume we will properly call it a Blackberry. It is certainly remarkable that a cross between two distinct species, one a Blackberry and the other a Raspberry, should prove by its seedlings to be of such "pure blood." It should be named in your honor, or at least according to your ideas. The quality of the fruit seems to be very good, although we can hardly judge of it properly from the rather wilted specimens which we have received here. This, of course, is an important point, and you have ample opportunity to judge of it in this respect."

H. E. VAN DEMAN, Pomologist, U. S. Dept. of Agriculture.

Hybrid Berry.

V. C.—16407.

Improved California Wild Dewberry × Cuthbert Raspberry.

Larger than the largest berry ever before known; bright crimson Raspberry color; productive as could be desired, and the most delicious of all berries for canning and drying.

The berries grow in clusters of five to ten or more, each, and individual berries often measure three inches around one way by four the other, and weigh one-quarter ounce each; even larger ones were weighed and measured last summer, and when exhibited provoked the question, "Will they be sold by the dozen?"

Stock on hand: One original plant. Price, $800.

LAWTON. HYBRID V. C.—18234. ERIE.

Hybrid Berry.

John Lewis Childs

V. C.—18234. Phenomenal (Humboldt)

This and the one just mentioned are from the same cross and the same lot of seed, and are in many respects very much alike, but this one is a stronger grower even than the other; producing annually eight or ten dark, bronzy, purple canes some twelve feet in length and one-half to one inch in diameter. The berries, the main crop of which ripens here in June (with Raspberries) are very large, dark crimson or purple color, and are covered with a shining silky coat which glistens like silver, giving the berries an extraordinary appearance; without a rival in quality for cooking, canning or drying.

Stock on hand: One original plant and fifty strong rooted tips. Price, $800.

The accompanying cut shows comparative sizes of Lawton, V. C.—18234, and Erie.

"It is an extremely interesting scientific fact that these species should cross together as they do. It was not believed possible a few years ago, and when it was suggested that the Philadelphia Raspberry and the Wilson's Early Blackberry were natural hybrids between the two species, much doubt was thrown on such a supposition. Your experiments will be valuable as showing that such crosses are not only practicable but have actually been made. It will be, no doubt, of great interest to fruit-growers generally.

THOMAS MEEHAN & SONS, Germantown, Penn.

Hybrid Berry.

V. C.–628. John Lewis Childs

Still another unique, productive and valuable berry, produced from the same cross as the last two, but unlike them has, in addition to the color and flavor of a red Raspberry, the same form, yet the berries, which have a rich, pleasant, subacid flavor, usually separate from the stem like Blackberries. There is no berry of any name or nature grown on the face of the earth which, when dried, has the delicious high flavor that these Blackberry-Raspberry hybrids do.

Stock on hand: One large original plant, and twenty strong rooted tips. Price, $400.

Trifoliate Dewberry.

No. 1. John Lewis Childs

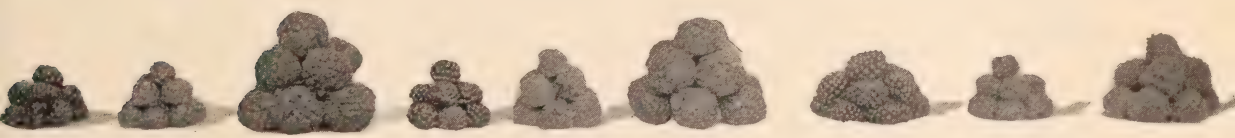
A curious, medium-sized, unusually sweet Dewberry, produced by crossing our California Dewberry and Siberian Raspberry; very productive, and might properly be called the Clover-leaved Hybrid. The vines are long, slender and vigorous, making a growth of ten or fifteen feet; multiplies rapidly from tips.

One large plant. Price, $200.

Trifoliate Dewberry.

No. 2. John Lewis Childs

Similar to No. 1, and grown from the same berry, larger, but not quite as sweet as No. 1. One large bush. Price, $200.



Earhart. Beebe's Golden. Dictator. (New.) Souhegan. Brinkle's Orange. Eureka. (New.) Japan Golden Mayberry. (New.) Marlboro. Golden Queen.

Photograph showing comparative size of standard old and new Berries.

New Raspberry.

"Eureka."

Larger than any Raspberry in cultivation; bright red, firm, very productive, and similar to Shaffer's Colossal in its piquant acid flavor, which is very much admired by most people, especially when canned. It is nearly twice as large as Shaffer's Colossal (its great grand-parent); better color and

quality, firmer, handsomer, and in all respects an improvement on that well-known kind. The bushes are more compact in growth, very free from prickles, and have a sturdy, hardy appearance.

Stock on hand: One original bush (very large), twenty-eight bearing-bushes, and fifty or more suckers. Price, $300.

"All the things we have received from you have turned out genuine, and just what you represented them. You must indeed be a benefactor in raising so many valuable fruits. Your name will be handed down to posterity."

D. HAY & SON,
Auckland, New Zealand.

GREGG. MARLBORO. DICTATOR (Life-size Photograph). LOVETT. DAVIDSON'S THORNLESS.

Hybrid Berry.

"Dictator." John Lewis Childs

A mammoth bright red berry, which combines in itself the flavors of the Gregg and Shaffer's Colossal, from which it sprang. The combination is one of the happiest, as the acidity of one is modified by the sweetness and aroma of the other. The plant is quite a strong growing variety, resembling Shaffer's Colossal most, yet the canes are shorter. The berries average more than three times larger than Gregg and almost twice as large as Shaffer's Colossal, the largest Raspberry before known.

Stock: One original plant and a few suckers. Price, $300.

"You have another berry that attracts my admiration; you have labeled it "Giant." In color the berry resembles Cuthbert Raspberry, while the foliage seems more like the Blackberry on the upper side, with the under side like the Raspberry; it also has the advantage of being nearly destitute of prickles. If this variety proves to be a good grower it certainly deserves attention."

H. E. VAN DEMAN,
Pomologist, U. S. Department of Agriculture.

Hybrid Raspberry.

S. S.—147.

This is the first practical cross of the cap and sucker Raspberries ever made, and no berry has ever been introduced which so delightfully combines the best flavors and aromas of both of these species.

All the plants from the first cross were almost or quite totally barren though vigorous beyond belief. The second generation gave many curious forms, colors, flavors, etc. The third generation, from the best of these, gave me this and the next mentioned berry. The seedlings of these improved ones are now proving to be generally fertile and productive.

Thus still another new race of berries has been added to the horticultural world.

Crossing species is but unlocking the door to the mysteries beyond, but long, tedious, careful selection produces grand results, yet few have the patience to persistently follow up Nature until she is glad to yield up some of her boundless horticultural treasures.

Stock on hand of this most delicious variety: One large original plant and several strong suckers. Price, $400.

"I think a great deal of the work you are doing for humanity, and hope you may live to originate many more new varieties of merit."

C. W. Gammon, Walnut Grove, Cal.

Hybrid Raspberry.

"Sugar Hybrid."

Another hybrid from one of my second generation Shaffer's Colossal Seedlings and Souhegan. It is the sweetest of all red Raspberries; Princkle's Orange even is not to be compared with it in sweetness and aroma. The berries are quite large; about the size of Marlboro; of a dark red color, and freely produced. The vines are tall and slender and almost thornless, and are a compromise in growth between the two species.

Stock on hand: One large original plant, and four strong bearing-plants. Price, $400.

"But every man is not a Luther Burbank, who has few superiors in horticultural matters."—*Sebastopol Times.*

Hybrid Berry.

"Paradox."

This wonderful berry appeared in the fourth generation from a cross of Crystal White Blackberry and Shaffer's Colossal Raspberry. The plant is in every respect a most perfect balance between the two species. The wood, bark, leaves, blossoms, prickles, roots, fruit and seeds cannot by any test be proven to be either one or the other.

Most of the plants from this cross are partly or wholly barren, though blooming freely, and often obtaining tree-like proportions. This one produces an abundance of oval, light red berries of good size, larger than either progenitor and of superior quality. It has been, like myriads of others on my grounds, a standing wonder to the many botanists and biologists who have seen it. (See last page of cover.)

From it, thoroughly distinct Raspberries, thoroughly distinct Blackberries, or any conceivable combination of both can be raised.

One very strong clump. Price, $800.

OCTOBER GIANT. (Life-size Photograph.)

E.—11546. (About One-quarter Size.)

Seedling Raspberry.

"October Giant."

Seedling of Eureka, remarkable for its habit of bearing in October, as well as for its unusual size, measuring nearly four inches in circumference; bright red color; rather soft except for home use.

One plant. Price, $200.

Hybrid Raspberry.

E.—11546.

Third generation from cross of Souhegan and Gregg. This produces most wonderful crops of fine, medium-sized red berries in October.

One plant. Price, $200.

Hybrid Raspberry.

S. S.—8183.

Third generation from Shaffer and Souhegan; probably produces larger fruit than has ever been offered in any market. Very dark red; superior quality; vigorous and productive canes.

One strong plant. Price, $300.

Hybrid Raspberry.

S. S.—6701.

A berry of extraordinary dimensions, growing on strong, vigorous, dark blue canes, having short blunt prickles, and with unmistakable marks of both Souhegan and Shaffer. Same cross as the last two.

One strong plant Price, $300

GREGG. S. S.—6701. S. S.—8940. DAVIDSON'S THORNLESS.

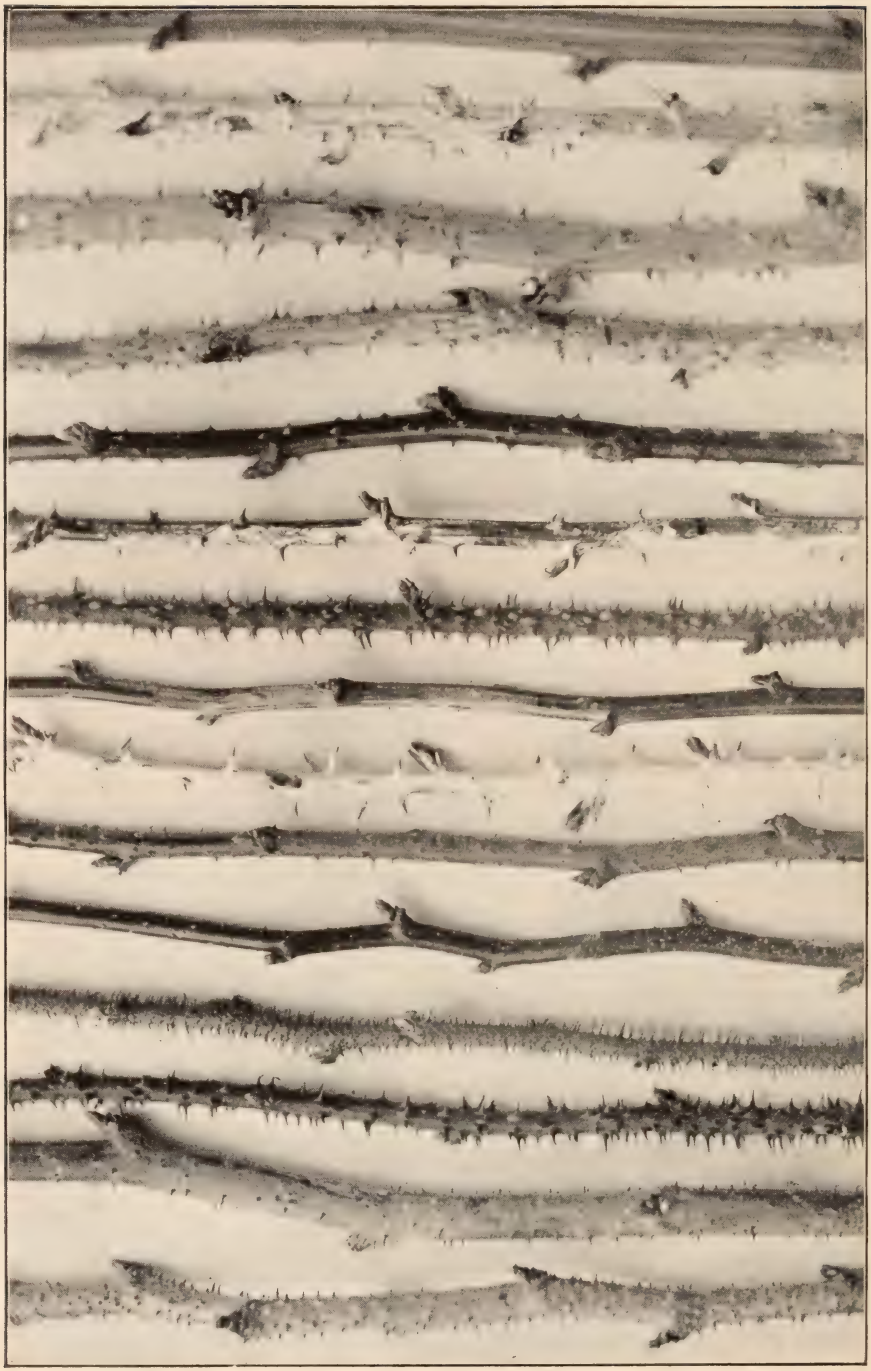
(Life-size Photograph.)

Hybrid Raspberry.

S. S.—8940.

This variety originated from the same lot of seed and is similar in growth and general appearance to the last. Berry more conical; firm; dark rich purple color.

One strong plant. Price, $300.



Photograph showing sample *forms* of canes of HYBRID RASPBERRIES. The *colors* vary from snow white, through lemon yellow, orange, scarlet, crimson, purple, light and dark blue and brown to black.

Hybrid Blackberry.

Autumn King.

Second generation from a cross of Lawton and Oregon Everbearing. A rampant grower and quite thorny, with curious, handsome, palmate foliage and pink blossoms. The berries, which ripen late in the fall, are of the largest size, and have a superior, aromatic sweet quality never found in any of the common summer varieties.

One very large plant. Price, $300.

Davidson's Thornless Raspberry, Wachusett Blackberry and others have been introduced as "thornless" and may perhaps properly be called so, though having more or less of these troublesome marks of barbarian wildness. I have produced many new tribes of *absolutely thornless* Blackberries, Dewberries and Raspberries, all parts of the bushes being as smooth and silky as an Apple twig or the new growth on a currant bush. These once useful but now useless appendages have been completely and forever eliminated.

Table showing average weight of a number of the standard Raspberries and some of the new ones described in this list. All grown together on sandy soil without irrigation.

Number of berries required to weigh an ounce:

Davidson's Thornless	35	Beebe's Golden	20
Earhart	34	Wild California Blackcap	20
Hansell	32	Marlboro	18
Phœnicolasius	30	Golden Queen	15
Cratœgifolius	28	Japan Golden Mayberry	15
Gregg	26	Shaffer's Colossal	13
Souhegan	23	Eureka	9
Brinckle's Orange	20	Dictator	8

"You certainly ought to be getting some money returns for the time, labor and money you have expended in originating new fruits.

I have felt impressed with the importance of your productions being put before the public by firms of the very best reputation. Doubtless some things which have been said in their favor from this office, and more that we hope to be able to say, will be quoted; and I sincerely hope that whoever will purchase your new fruits will not say more than is strictly true. If we are misquoted they will hear from us. You may count on this division to endeavor to honestly represent to the country things just as they are.

H. E. VAN DEMAN,
Pomologist, U. S. Dept. of Agriculture.

Photograph showing sample canes of Blackberry × Raspberry hybrids all raised from seed of one plant.

Raspberry-Strawberry Hybrids.

Out of seven or eight hundred of these curious hybrids not one has ever produced a berry, though blooming with the greatest profusion; as the blossoms fade a bunch forms resembling a miniature Strawberry, but they never mature. The plants when young are practically Strawberry plants, but with age produce canes five or six feet high, multiplying by curious underground stolons. The leaves are trifoliate invariably; the canes are thornless or nearly so.

A cluster of blossoms and leaves from thirty varieties are shown in the photograph on next page.

"I have recently been to see Luther Burbank, and have examined his wonderful work at hybridizing. He has row after row of hybrids, such as ten years ago were thought impossible—five solid acres of them, after tens of thousands had been cast aside, and he is constantly rooting out the poorer ones, which the student of the flora might spend weeks over. His manipulations are so exact, that his hybrids are hybrids. Those between the Raspberry and the Strawberry are very curious. They grow about sixteen inches high, with a Strawberry leaf and bristly stems with peculiar underground stolons. They bloom but do not fruit. A true hybrid may be nearly an exact reproduction of either parent, showing no mark of hybridity whatever, yet if it fruits, seedlings of it may go all to pieces. Mr. Burbank's grandest success so far is on the Rubus family. What the outcome of such a vast conglomeration will be I have no idea. I think, that in view of all that has been done, it would not be very wild to say that all plants could be hybridized if one had time and skill.

"Mr. Burbank's grounds prove that Darwin was right when he said: 'It is reasonable to suppose that all life has descended from one or a few original germ or germs.'"

D. B. WEIR, in *Rural New Yorker*.

Seedling Rose.

M.—11120. "Pet" (afterwards renamed)

A most beautiful, light rosy crimson, ever-blooming Rose, grown from mixed seed. It has been generally pronounced "The best bedding Rose." It will always give satisfaction, as the bush grows in a compact, rounded form, and has firm glossy leaves, which are never diseased. It is always in bloom first of all, and continuing throughout the whole season is also the last to stop blooming.

Fifty large bushes. Price, $300.

Seedling Rose.

M.—19928.

Grown also from mixed seed. Very closely resembles Papa Gontier, but is more double, and blooms much more profusely.

Fifty large bushes. Price, $300.

Seedling Rose.

M.—17806.

"Peachblow."

It is impossible to do this Rose justice by description, as the peculiar shading is something not before developed in Roses to the extent that it is in this one. The inside of the petals is a pale, silvery, peach pink, like La France; the reverse, dark, bronzy carmine pink. When the buds are opening the effect can be imagined. One of the heartiest of plants, compact growing, with large healthy foliage.

Forty large bushes. Price, $300.

J.—26940.

Seedling Rose.

J.—26940.

A most graceful and brilliantly colored Rose, much resembling Gen. Jacqueminot, but an improvement in many respects.

Twelve plants. Price, $300.

Seedling Rose.

H.—813. Santa Rosa S

Seedling of Hermosa and like it in its habit of blooming constantly and even more abundantly. The blossoms are of a much clearer, richer pink aud stand upright instead of drooping. The bush is more compact; cuttings grow as readily as coleus, and often bloom when only two inches high.

Sixty large bushes. Price, $150.

"Santa Rosa has one of the largest experiment stations in the world. The patient and expensive scientific work which is being carried on at this establishment in the production, or, more correctly, the creation, of new fruits and flowers is destined to make our city widely known to the horticultural world, as nothing of the sort has ever before been undertaken on so large a scale by any single individual.

"In the creation of new plants Mr. Burbank has been surprisingly successful; several of them are now extensively grown throughout the civilized world. By a glance at his order-books we learn that his new productions have brought him orders this winter from many far-away places, among which we noticed New Zealand, England, The Netherlands, France, Italy, Prussia, Canada, Guatemala, Mexico, Chile, Sandwich Islands, British Columbia, Japan, and all parts of the United States."—*Santa Rosa Democrat.*

Rugosa Hybrids, etc.

Besides the Roses before described, a climbing pink Rose is attracting attention. It received a medal from the California State Floral Society. Also some extra fine large double Rugosa Hybrids from Rugosa X Gen. Jacqueminot, Rugosa X La France, Rugosa X Paul Neyron, Rugosa X Banksia, Rugosa X Sinica and other crosses. These, though lacking in the lasting qualities of most roses, are, in brilliancy of color, unexcelled.

Prices on application.

"BURBANK'S EXPERIMENT GROUNDS.—This name conveys little idea of the important character of a unique industry which is being prosecuted by Luther Burbank, an enthusiastic believer in the Darwinian theory of evolution, and a successful horticulturist. His grounds are producing some remarkable results in successful combinations of plants, trees, vegetables, flowers and fruits. The work requires great care, time, patience and skill such as few men possess. Nothing like Mr. Burbank's experiments on so large a scale has ever been attempted before. Most of the *Daily Report* readers are familiar with Mr. Burbank's name and work; and, though he takes great pleasure in entertaining visitors, and explaining to them what changes and improvements he is making in plant creation, his work is such as to preclude the possibility of admitting the public, and requires to be entirely free from interruption. Some of the new plants and flowers will soon be ready for introduction."—*San Francisco Daily Report.*

A New Calla.

Variegated Little Gem.

The Little Gem Calla has made itself a favorite everywhere by its dwarf, compact habit of growth and profusion of flowers. In a field of them, which I had growing last summer, one plant produced beautiful golden-marbled leaves. It was removed and divided, and there are now eight strong plants in existence, all variegated, with irregular golden marblings; even the flower-stalks are striped and marbled green and gold. The blossoms are whiter than those of the plain Little Gem, are produced as freely, and the plants are as vigorous and increase as rapidly.

Stock on hand: One large old plant, with numerous bulblets and offsets, and seven strong young plants. Price, $1,000.

New Calla.

"Snowflake."

Among the eighteen thousand seedlings of Little Gem Calla which I have growing one has appeared which is a gem among little gems. It never grows half as large as Elliott's Little Gem, and produces in profusion tiny, snow-white, gracefully molded flowers. The new variety is as hearty, blooms as freely, and multiplies as rapidly as any of the Callas, and will become indispensable to every florist and lover of flowers. Price, $2,000.

Giant Calla.

This grows four or five feet high on common soil, producing handsome mammoth leaves and snow-white flowers almost large enough for a hat.

Fifteen strong plants. Price, $200.

"One of the most experienced, practical and scientific propagators in the world."
—*Orchard and Farm.*

New Calla.

Golden Variegated Richardia Albo Maculata.

There is hardly a plant in general cultivation which has more pleasing variegated foliage than the spotted leaved Calla. The wholesale demand for the bulbs which have been raised from *seed* on my grounds has been enormous.

Among hundreds of thousands thus raised one has been secured with the usual white spots and also *handsome, golden variegated leaves;* both the white spots and the golden variegations on each leaf. The plants, though not growing as tall, have as large leaves, are as vigorous, and multiply as rapidly as the common kind; as handsome as some of the fancy leaved Caladiums, and as easily grown as potatoes.

Five plants. Price, $1,500.

"The day spent at your place and the inspection of your myriad interesting experiments in horticulture was one of the most valuable of my whole summer's trip. A visit at your place was one of the things which I had hoped would fall to my lot, but at the same time it came sooner than I had expected or hoped. My interest will continue to be very deep in your experiments."

C. L. Hopkins, Assistant Pomologist, U. S. Dept. of Agriculture.

Hybrid Lilies.

No class of hardy plants can claim so many captivating charms for all as Lilies. Their stately growth, large, graceful, richly colored or pure white flowers, the exquisite fragrance of some varieties, and their ease of culture render them the most generally admired of all bulbous or tuberous flowering plants; and there is no lack of choice varieties for the hybridist to work upon, as the species are very numerous and their characteristics well defined; but numberless most subtle influences vary the results of the hybridization of Lilies so that they have been generally neglected as incorrigible.

The uncertain and unsatisfactory results of hybridization combined with the great amount of care and patience and the length of time required to produce new varieties has, with a few notable exceptions, discouraged experiments with the Lilies, otherwise the most promising of all plants for such study and combination; yet the production of new forms depends on this important point.

Sixteen years ago I commenced experimenting in crossing our native Pacific Coast Lilies, adding, from time to time, all the exotic species and varieties which seemed to promise favorable results, until my collection was the most extensive in the western half of America; these have been combined and selected, and recombined and reselected, until the most important results ever achieved among Lilies are now an embodied fact.

Can my thoughts be imagined, after so many years of patient care and labor, as, walking among them on a dewy morning, I look upon these new forms of beauty, on which other eyes have never gazed? Here a plant six feet high with yellow flowers, beside it one only six inches high with dark-red flowers, and further on, one of pale straw, or snowy white, or with curious dots and shadings; some deliciously fragrant, others faintly so; some with upright, others with nodding flowers; some with dark-green, woolly leaves in whorls, or with polished, light-green, lance-like, scattered leaves.

As the fresh, dew-laden petals of these new creations, which had never been spread out to the light of day, were unrolled before me a new world of beauty seemed to have been found and a full recompense for all the care bestowed upon them.

The bulbs are a study, and had not some of them been in value ten times greater than their weight in refined gold, photographs would have been obtained to show their peculiar forms.

Of some of the older hybrids and seedlings I have as many as a thousand bulbs each. All these are for sale, as I have half a million kinds yet to unfold their petals for the first time, and am still planting from *one to three pounds of hybridized Lily seed every season.*

A list of some of the Lilies combined in these hybrid seedlings is given below:

Auratum, many varieties;
Batemanniæ;
Browni;
Bloomerianum;
" ocellatum;
Bulbiferum;
Cordifolium;
Candidum, varieties;
Callosum;
Canadense, varieties;
Columbianum;
Carnioclinum;
Catesbæi;
Chalcedonicum;
Elegans, many varieties;
Giganteum;
Grayi;
Hansoni;
Humboldti;
Japonicum;
Krameri;
Longiflorum;
" eximium;
Leitchlini;
Martagon, varieties;
Maritimum;
Pardalinum, many varieties;
Parryi, varieties;
Parvum, varieties;
Philadelphicum;
Speciosum, varieties;
Superbum;
Sarana;
Takesima;
Tigrinum, varieties;
Tenuifolium;
Unbellatum, varieties;
Wallacei;
Wallichianum;
" superbum;
Washingtonianum;
" purpureum.

Among the Lilies which have increased so that a good stock can be offered I mention two.

P.—2854. Fragans. Carl Purdy

A very handsome, large flowering L. pardalinum, growing two feet high, with short, broad, glossy leaves in whorls. It multiplies rapidly and is the finest of the pure bred Pardalinums.

Stock on hand: Five hundred large bulbs. Price, $300.

P.—72721. "Glow" Carl Purdy

In Pluton Creek, near the Geysers, in 1876, a dwarf wild L. pardalinum was found. From this many curious seedling forms have developed by constant selection since; the most remarkable being a variety *growing only ten inches high* and producing from *twenty to forty blossoms on each of these short stalks* (the usual number for the species being from three to eight). The effect produced by this crown of flowers set on the tuft of dark-green leaves is very pleasing and not to be found elsewhere among Lilies. This variety is as easily grown as Potatoes.

Stock on hand: One thousand large bulbs. Price, $500.

"You are certainly entitled to the credit claimed by some of our favorite Eastern florists, of doing 'better than we promise.'"

HENRY NEWMAN, San Francisco, Cal.

CALIFORNIA.

Gladiolus.

Four years ago six of the best from among a million or more seedling gladioli, which I had been raising during the ten years preceding, were named and introduced, but the demand for seed and bulbs has been so great, and so constant, that I have never been able to raise them fast enough to supply hundreds where thousands were wanted.

One, a beautiful double variety (California) is the *first double Gladiolus* and the *first of a type* in which the flowers are closely aranged all around the spike, like a Hyacinth, adding a new charm to one of the handsomest flowers in cultivation. From "California" more double ones have been obtained, and with flowers of even better lasting qualities, and of various shades, all having the remarkably thick, lasting petals which have quickly made the "California strain" so popular; in the new strain the first flower remains fresh to say good morning to the very last one to bloom, even though the sun may be doing its best; none of the older varieties can stand such a test.

The new gladioli must be seen, as all descriptions of such a variable flower must necessarily be unsatisfactory. A few especially fine ones are mentioned among the *crême de la crême*.

No. 4. *White;* very large flower.
No. 5. Dwarf, *double*, cherry striped white.
No. 6. Dwarf, *double*, cherry striped crimson.
No. 8. *Best* and clearest *yellow* Gladiolus in existence.
No. 12. Very peculiar dots and markings on light crimson ground.
No. 22. Crimson, white striped.
No. 26. Clear *yellow*.
No. 57. Dwarf, *double* scarlet.
No. 62. Dwarf, *double*, pink.
No. 63. *Double*, striped crimson and white.

"Mr. Burbank has devoted a life's work to the growing of new things, and has had wonderful success in gaining hybrids between distinct species of hundreds of fruits and flowers, many of them between species that ten years ago a man would have been considered 'a dead gone crank' if he had intimated that such hybrids could be obtained.

"He has to-day growing, with many of them in fruit, hybrids between nearly all the different species of the Almond family, between nearly all the species of the Blackberries and Raspberries, and between the different members of each, and also the Dewberries. Some of these are not only exceeding curious, but of wonderful vigor, productiveness, size and quality of fruit. I would say that his best Dewberries and Raspberries exceed all the older varieties at least four times in productiveness, and are all that could be asked for in size and quality of fruit. These are only examples of what he has been doing. Nearly every known fruit and flower that can be made to grow 'in this California climate' has been manipulated, species ripped up, broken up and 'taken through a course of sprouts,' until a botanist who should view the 'remains' could hardly find a whole plank large enough to place his feet on.

"As one example of his work, he has grown from the choicest seed, selected from every species and strain, over 100,000 roses; from these he selected with the utmost care 25,000 and flowered them, and I saw them in bloom at three different times this season. And though I am no florist I know that there were some 'good ones' among them, and that the square acre of new seedling roses all in bloom was a goodly sight.

"The gladioli were early a favorite flower on this coast; but the old varieties all had two serious faults. In our richest of rich soils the stems grew too tall (here we have a gentle, sometimes increasing to a strong steady wind nearly constantly in summer, generally from one point of the compass, which was hard on these tall slender stems), and the flowers were scattered too much on the stems, also they were not large enough and not enough of them in bloom at one time. Mr. Burbank set himself to the task of remedying all these defects, with one other very prominent one here under our bright skies; namely, the flowers of the old strains did not well withstand this bright sun and drying wind. Well, he grew thousands and thousands of seedlings, crossed and recrossed the varieties, with the result that every defect has been eliminated, and he has a new creation, embodying in perfection every point sought for and more. He has doubles of the largest size, perfect in color and markings. He has strains of nearly all colors of the largest of flowers, so closely ranked that the flowers seem to be ranked in four rows on the stem, and, best of all, flowers to the tips of the canes, so close together as to give the extremity of the flower stem a perfect solid cone of flowers, the petals entirely hiding the stem on all sides. The individual flowers are simply immense in size, we found numerous ones of many varieties five and one-half inches from tip to tip of petals, with colors of every kind and markings known to the species. As to the size of the flowers I will say I visited many gardens in Santa Rosa and Petaluma which had in bloom, I may say, nearly all of the older choice varieties, and the largest flower found was four and a quarter inches across the petals, the average being about two and a half inches, and then having all the care that rich soil, culture and water that could be given them, while the Burbank seedlings were growing in crowded rows on light sandy soil and no irrigation.

"Mr. Falconer speaks of 'grand flowers with stems five and six feet tall,' Mr. Burbank bred for an ideal plant with a stiff short stem able to support itself in a windy country with stems two and a half to three feet and a half high, and he got it. Again the finer old sorts were too ephemeral, would not withstand the sun with their thin petals. Mr. Burbank bred for thick fleshy porcelain petals that would withstand bright sun and buffeting breezes, and he got them.

"And so it seems to be nearly all the way through. He has developed nearly everything he has tried for. He has thousands of new things, some of them truly wonders, as an example has 10,000 new varieties of Potatoes selected from tens of thousands of seedlings. I will close by saying, please do not burden Mr. Burbank with inquiries. He is a very busy man, and has nothing for sale except such things as he advertises each autumn in his list of novelties."—D. B. WIER, in *American Florist*.

"A serious defect of some otherwise very good varieties of the Gladiolus is lack of substance in the petals, unfitting them to endure the sunshine long without wilting. This is a fault of many of the beautiful sorts sent out by Messrs. Kelway of Somerset, England. Special efforts have been made to overcome this imperfection by growers in various parts of the United States, the most successful of whom is Mr. Burbank, already referred to, who seems to have obtained a new strain suited to the warm, dry climate of California. Among his choice varieties is 'California,' the nearest approach to a double Gladiolus yet obtained, bearing its flowers all around the spike like a Hyacinth."—J. R. BLACK, in *New York Examiner*.

"I am sorry to say that these California Gladioli, of which I had formed such high expectations, are not what we consider very good flowers in the vicinity of Boston; none of

them withstand the sun better than our ordinary kinds ; none of them have flowers above the ordinary size ; none of the flowers have colors or shadings which would cause particular notice."—W. E. ENDICOTT, in *Popular Gardening*.

"Last November I was attracted to your Gladiolus by an article by W. E. Endicott in *Popular Gardening*. I ordered some from an Eastern seedsman, and planted them early to try them in the hot sun. To-day has been ninety-five degrees in the shade, and yet each flower is fresh and good. I have some four hundred varieties all named, and will say that yours are all you claim for them. 'Santa Rosa' stands the sun the best of any Gladiolus I ever saw, and I have grown Gladiolus for fifteen years. If you get out anything better than these let me know, as I shall want them. I am well pleased with my investment. May all your efforts be crowned with success." T. S. MOORE, Terre Haute, Ind.

"The Gladiolus Bulbs you sent me last year (California strain) were very fine, and they certainly endure our hot sun better than most of ours. They also keep longer in water."
M. CRAWFORD, Cuyahoga Falls, O.

"For the past sixteen years I have been purchasing the best-named Gladiolus gandavensis as sent out from year to year, for which I have paid large sums of money, but shall not buy any more in the East, as from a small lot of your *second-class* mixed seedlings I obtained more really grand first-class flowers—and among them a purer white than I had ever seen before. The colors and shadings are brilliant in the extreme, and they stand the sun wonderfully, the first flower remaining fresh for many days until the last one is open, while the Eastern varieties often fade before noon."
J. P. STANLEY, Santa Rosa, Cal.

"The Gladiolus you sent me were the finest among several hundred that I had growing last season." SETH WINDQUIST, Russellville, Oregon.

"Our Gandavensis and Lemoinei varieties have at one time usually five blossoms, and as they drop more follow. We notice in yours that the full stem blooms at one time."
J. W. ADAMS (Nurseries), Springfield, Mass.

"I am much pleased with your Gladiolus."
T. S. MOORE, Terre Haute, Ind.

Hybrid Clematis.

No hardy flower except the Rose and the Lily is so magnificently beautiful as the new Hybrid Clematis ; seedlings of which have been grown at the rate of ten thousand a year for several years, and some of the best ones in existence secured. Some of these are mentioned below :

1. A double variety, with broad snow-white sepals ; flowers, five to six inches in diameter ; in bloom almost constantly throughout spring, summer and fall.

2. Another double white seedling ; the flowers resemble those of the White Water Lily ; grows freely and blooms abundantly.

3. A double light sky-blue seedling or Jackmanni ; a perfect rosette of hundreds of gracefully arranged narrow sepals.

4. A double dark purple hybrid seedling ; very large flowers.

5. A seedling of Clematis Coloradœnsis the branches and leaves of which are pale green ; the large clusters of white flowers are followed by the ornamental feathery carpels which are, by their unusual light color, very conspicuous.

6. Handsome seedlings produced by crossing Clematis crispa, C. coccinea and others. Prices on application.

New Myrtle. Jackson & Perkins

The most attractive shrub and one which everybody admires for the beauty of its foliage and flowers, and its spicy fragrance, is a new silver variegated Roman Myrtle or "Bride's Myrtle (Myrtus communis) which originated on my grounds in 1882 from seed of the common green-leaved variety.

The original plant and all the cuttings which have been grown from it have maintained their beautiful variegation and compact growth without any tendency to change. There is an old variety which grows upright with straggling branches, the leaves of which have a dull unattractive appearance.

The new one grows compact, with drooping branches, graceful in every outline; each leaf has a broad border of snowy white, with only a narrow line of green in the center, and growing readily from cuttings; it is, without doubt, the *best* variegated shrub for outdoor planting where it is hardy, and one of the best for florists' use and home culture.

Stock: Three hundred large plants and about 500 small ones, from both of which 20,000 cuttings can be made next fall. Price, $400.

"Nothing could be more elegant, pleasing and satisfactory. The handsomest variegated shrub I have ever seen."

DAVID MELDRUM, California State Gardener (once with Robert Buist).

New Poppy.

"Silver Lining." W. Atlee Burpee & Co.

By six years' selection from a sport of Papaver umbrosum (Butterfly Poppy) I have succeeded in producing a variety, now nearly or quite fixed, which instead of being crimson and black on the inside of each petal is a glistening silvery white; the outside remains the same brilliant crimson, producing an effect which is strikingly beautiful.

A New Plant.

The Nicotunia.

This is the first time this word was ever printed, and the plant is one which has never before been seen; some botanist asks, "What is it?" It is the name which I have given to a new race of plants produced by crossing the large flowering Nicotianas with the Petunias. If one thinks he can take right hold and produce Nicotunias as he would hybrid Petunias or cross-bred Primroses, let him try; there is no patent on their manufacture; but if the five hundredth crossing succeeds, or even the five thousandth, under the best conditions obtainable, he will surely be very successful; I do not fear any immediate competition.

The plants have slender, drooping or trailing tomentose green, red and purple stalks and leaves twice or three times as large as the Petunia; the flowers are handsome, white, pink, carmine or striped and borne in bounteous profusion. No seed is ever produced, but they are very readily multiplied by cuttings.

"Burbank, the wizard of horticulture."—SAM'L WATSON, in *Orchard and Farm.*

Nicotiana Glauca. Hybrid Nicotiana Wigandoides Rubra × N. Glauca.

Hybrid Nicotianas.

After several years I have at last succeeded in crosssing Nicotiana alata, N. glauca, N. purpurea, N. suaveolens, N. affinis, N. colossea and others. Many of the new hybrid varieties were only obtained after several thousand crossings, under all conditions which seemed to promise success; but now I have *perennial varieties* with glaucous green foliage, edged, marbled and mottled with white, bearing pink flowers in cymes often two or three feet across, with from 500 to 2,000 or more blossoms in each cyme. These plants grow from five to eight feet high.

Another strain of these hybrids grows more like N. affinis, with crimson and white striped flowers in abundance; ever-blooming. (See cut, page 2.)

Another strain grows in the form of a branching tree, with pale, greenish-yellow, tubular flowers in panicles in such profusion that the upper part of the plant appears to be all flowers. Most of these hybrids are readily propagated from root cuttings or slips; none of them ever bear any seed; all are unusually hardy.

Begonia-leaved Squash. W. Atlee Burpee & Co

A mammoth Squash which produces abundant crops for stock-feeding, and has bright golden variegated leaves. The unusual leaf variegation appeared four years ago on a single vine, and by selection has become so fixed that at least ninety-five per cent are variegated. The form, size and uniform appearance of the Squashes has also been greatly improved.

"It gives me great pleasure to deal with one whom I know so well through the horticultural press, and whose work I so much esteem."

W. B. CLEVES, Binghamton, N. Y.

New Potatoes.

These are the best of several thousand seedlings, and have been tested for five years.

1. A long, nearly cylindrical, smooth, white seedling of the Burbank; the eyes are hardly perceptible, and the flesh has the sweet, rich, Potato flavor which the Early Rose had in its best days. The Potatoes, which are produced abundantly, often grow eight or ten inches in length.

2. A short, flatish, oval, light-colored Potato with a russet coat, from a cross of the old "Chili" or "Bodega Red" and the Burbank.

Both are superior keepers, and have never shown any tendency to become diseased.

"Dr. Eisen, of the California Academy of Sciences, remarked that in the Eastern States and Europe, where he has lately been collecting material for a new book, the name of Luther Burbank was familiar to scientists everywhere, and that unusual interest was manifested in his work."—*Santa Rosa Democrat.*

"Your system of packing is undoubtedly perfect. We have always considered you perfectly reliable." STEUBENRAUCH BROS., Mexia, Texas.

Ornamental Cross-bred Tomatoes.

By crossing the Little Currant and the Dwarf Champion Tomatoes some unusually handsome ornamental varieties were produced. The photograph on the first page of cover shows some of the fruit and one of the leaves.

New Tomato. W. Atlee Burpee & Co.

"Combination."

This distinct novelty in ornamental fruiting plants grows about twelve inches highb y fifteen inches across. The curious, plaited, twisted and blistered but handsome leaves, sturdy compact growth and odd clusters of fruit will make it a favorite ornamental plant which can be easily grown by everybody.

"Luther Burbank has established a world-wide reputation for the excellence of his products."—*Santa Rosa Republican.*

Other New Plants.

A seedling Ampelopsis Veitchi may be mentioned which has dark-red leaves throughout most of the season, turning very dark in the fall.

A Wax Myrtle (Myrica cerifera) which produces a surprising amount of berries which grow in great clusters or balls, are easily gathered, and have an unusually thick coat of wax.

Some charming, cross-bred, seedling Tigridas, New Cannas, Arums, Amyrillis, Brodiæs, Aquilegias, Asters and a multitude of other things not yet near enough to perfection to merit a special description; yet some of the hybrids which I have obtained are worthy of much study. Among which I will mention:

Peach X Almond,
Peach X Japan Plum,
Peach X Chickasaw Plum,
Peach X Apricot,
Almond X Peach,
Almond X Japan Plum,
Apricot X Japan Plum,
Pyrus Japonica X Quince,
Chinese Quince X Common Quince,
Quince X Crab Apple,
Japan Quince X Apple,
Chickasaw X Japan Plum,
Apricot X Peach,
Japan Plum X Peach,
Japan Plum X Chickasaw,
Myrobolan X Japan Plum,
Domestic X Wild Goose Plum,
Crab X Common Apple,
Pyrus Japonica X Chinese Quince,
Quince X Apple,
Chinese Quince X Apple,
Crab X Common Apple,

Potato X Tomato, etc., and hundreds of others, which will be mentioned later.

Not only one of each of these is growing, but many, in some cases several hundred each, and, of some, thousands.

APETALOUS PISTILLATE BLOSSOMS OF PLUM × APRICOT HYBRID.

SAME. (Life Size.)

"Our interest in your work and the new things you have produced is in no way decreased." H. E. VAN DEMAN, Pomologist, U. S. Dept. of Agriculture.

"Careful and conscientious and devoted to his calling, in which he is a master, he works and deals in a thorough manner, and merits the good name and increasing business which the people award to him. An hour in his grounds is an hour delightfully passed."—*Santa Rosa Republican.*

Facts and Possibilities.

There is no possible room for doubt that every form of plant life existing on the earth is now being and has always been modified, more or less, by its surroundings, and often rapidly and permanently changed, never to return to the same form. When man takes advantage of these facts, and changes all the conditions, giving abundance of room for expansion and growth, extra cultivation and a superabundance of the various chemical elements in the most assimilable form, with abundance of light and heat, great changes sooner or later occur according to the susceptibility of the subject; and when added to all these combined governing forces we employ the other potent forces of combination and selection of the best combinations, the power to improve our useful and ornamental plants is limitless. But in crossing, as in budding or grafting, the affinities can only be demonstrated by actual test, which often involves long, tedious, and expensive experimenting.

In budding or grafting, the nurseryman finds every conceivable stage of congeniality between stock and bud or graft, from actual poisoning to a refusal to unite; or uniting and not growing; or growing for a short time and dying; or separating where united; or bearing one or two crops of fruit and then suddenly blighting; or separating after years of growth up to complete congeniality. So in crossing, all grades of hybridity are to be found. Crossed plants generally have the characteristics of both parents combined, yet, owing to prepotency of the life-forces in certain directions or congeniality of surroundings sometimes show only their parentage on one side producing uncertain results in the first generation, and these cross-bred seedlings often break away into endless forms and combinations, sometimes even reverting to some strange ancestral form which existed in the dim past; or the break may not occur until after many generations, but when once the old persistent type is broken up the road is open for improvement and advance in any useful direction. Some times hybridized or crossed seedlings show considerable or even great variations for weeks and then change at once to one or the other of the original types; or they may show no change in foliage or growth from one or the other parent forms until nearly ready to bloom or bear fruit, when they suddenly change in foliage, growth, character and general appearance.

Tomatoes may be grown from seed pollenated from Potato pollen only, and Juglans regia from nuts pollenated only from Juglans cinerea or J. nigra. The common Calla has often been grown from seeds pollenated only by Calla albo-maculata; also pure Wheat from Rye pollenations, and *vice versa;* pure Blackberries, Raspberries and Dewberries from Apple, Rose, Quince or Mountain Ash pollenations.

Seedling Lilies very rarely show the effect of foreign pollenation, though often producing seed much more abundantly than with pollen of the same species.

These facts have been observed by me so often, and have been worked on so extensively, and can be proven so readily, that the common theory of parthenogenesis must, in these cases, be set aside.

There is no barrier to obtaining fruits of any size, form or flavor desired, and none to producing plants and flowers of any form, color or fragrance; all that is needed is a knowledge to guide our efforts in the right direction, undeviating patience and cultivated eyes to detect variations of value.

The descriptions in this list are necessarily short and incomplete, but in all cases exaggeration has been studiously avoided.

It is fair to suppose that one who has had extensive experience in any special line should be able to give judgment approximating impartiality. All

the new plants mentioned in this list and the supplementary lists which are to follow will have to be judged by the great discriminating public, and will infallibly stand or fall by its verdict, without regard to what the orignator or introducer may see fit to say.

Photograph Showing BURBANK Potatoes grown on "PONDEROSA" Tomato Plant.
(See cut page 1, showing result of *vice-versa* grafting.)

Botanic Gardens for California.

"The *Pacific Rural Press* states that J. B. Armstrong, of Santa Rosa, has donated, in trust, 640 acres for the preservation of the redwood timber land in Sonoma County, and the construction of a botanic garden. The trustees are his daughter, Miss Kate Armstrong; E. J. Wickson, of the *Rural Press*; Charles Howard Shinn, the bright and intelligent horticultural writer; Luther Burbank, the great experimenter, in hybridization; and Robert Underwood Johnson, of the *Century Magazine*. They have accepted the trust. The tract is on the north bank of the Russian River.

Col. Armstrong, now far advanced in years, has carefully preserved this forest; not a log of redwood timber has been cut from it since it came into his possession. All that will be done, at present, is to look after the preservation of the redwoods, but the work of the garden will be gone on gradually. It is believed that the garden can be made self-supporting. Although it has no endowment at present, it is said to be worth $150,000. Col. Armstrong is an Ohio man. He has been for several years the owner and editor of the *Santa Rosa Republican*.—*Meehan's Monthly.*

What Science Has Done in Agriculture.

Not only has intensive cultivation taught us how to draw a larger return than formerly from a particular soil and a given surface, but by the selection of seeds we have doubled and tripled the formation of sugar in beet roots; by like selections, the production of the Potato has been augmented, and we are seeking, with certainty of success, yet more considerable increase in the production of Wheat. No less progress is reached in the production of fruits and vegetables and of cattle, to the daily amelioration of the general condition of the human race.

This advance has been promoted partly by close acquaintance with the general laws of living nature as revealed by disinterested science—laws which are the essential foundation of every application, and equally and in a way no less worthy of admiration by the efforts of inventors, those men of practical ingenuity, who labor at the same time for the increase of their own fortunes and for the good and profit of mankind.

P. E. M. BERTHELOT, in *Popular Science Monthly.*

PRESS OF
H. S. CROCKER COMPANY,
SAN FRANCISCO.

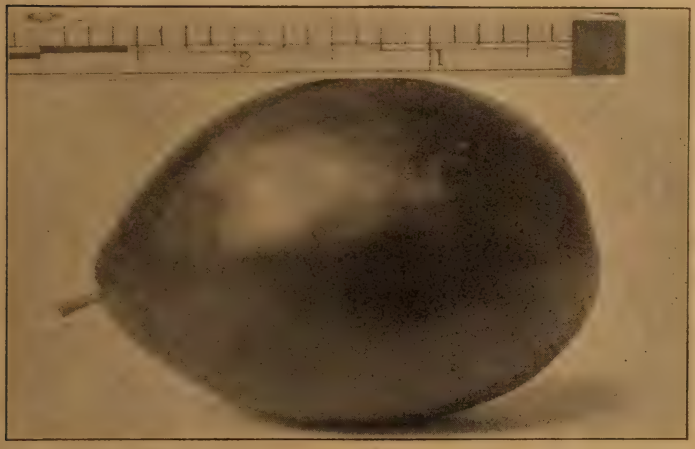
Sample Leaves from HYBRID BERRY PLANTS, all grown from seed of one plant.

NEW CREATIONS

IN

Fruits and Flowers,

JUNE, 1894.



"The inventor and author find protection in the arm of the law, but not so the one who, through skill and patience, turns the most insignificant flower into a thing of beauty, or the vine that fails to hold its few offerings until the autumn sun does its work, into one that holds out its luscious clusters to tempt the very gods."—*Boston Globe.*

PRICE: 25 CENTS.

("New Creations" for 1893 same price.)

BURBANK'S EXPERIMENT GROUNDS,

Santa Rosa, California, U. S. A.

Office and Residence:
204 Santa Rosa Avenue.

Cable Address:
"Burbank, Santa Rosa, Cal."

"There seems to be no limit to the changes which organisms undergo under changing conditions of life." DARWIN.

WITH most sincere thanks to all those who have so kindly and so liberally purchased the new plants mentioned in my last circular, thus lending the most solid encouragement and placing me in a condition to cheerfully continue in the same work, I again come before you with more new fruits and flowers, and hope to receive such further encouragement as these new productions deserve.

The sympathy of the reader is desired, requiring as it does the nicest perception and care to give the most accurate description and impression possible in the small space of this catalogue, which has been made up at odd moments when business was calling loudly in many directions.

In reply to very numerous inquiries, and as a matter of general information, the names of most of the purchasers of the new fruits and flowers mentioned in the list of June, 1893, are here given :

ANDREW J. COE, Meriden, Conn., Mammoth Japan Chestnut, "*S.—8,940.*"

JOHN LEWIS CHILDS, Floral Park, N. Y., Quince, "*California ;*" Plums, "*Delaware,*" "*Shipper*" and "*Juicy ;*" Berries, "*Golden Mayberry,*" "*Primus,*" "*V. C.—16,407 ;*" Trifoliate Dewberries, "*No. 1*" and "*No. 2,*" "*Eureka*" and "*Sugar Hybrid ;*" Lily, *Dwarf Pardalium* "*P.—72,721*" and "*Cross-bred Tomatoes.*"

STARK BROS., Wholesale Nurseries, Louisiana, Mo., Quince, "*Van Deman ;*" Prune, "*A. P.—318 ;*" Plums, "*Golden,*" and half interest in "*Doris.*"

A. BLANC & CO., Philadelphia, Pa., the *whole stock* of Gladiolus "*California strain.*"

SUNSET SEED AND PLANT CO., San Francisco, Cal., Seedling Roses, "*M.—11,120*" and "*M.—19,928.*"

Other purchasers will be announced in due season. The purchasers of all the above have complete control except of the "*Doris*" Plum. It will be useless to write to me for any of them for any purpose whatever ; they will be introduced by the purchasers as soon as possible.

"The novelties of 1894 are comparatively few, that is, novelties announced for the first time. Novelties of surpassing merit are always rare, and there is always an eager market to secure them by the more substantial firms of the country. It is for this reason that less reputable firms are ever ready to foist their counterfeits upon credulous people."—*Rural New Yorker.*

THE PRICES of all stock mentioned in this list will remain the same until the next crop of fruit or flowers of each variety appears. After still further test of these, under more favorable circumstances, the right is reserved to increase the prices at once of such as may be considered of greater value.

TERMS : Cash, unless by special agreement.

Address all orders to

LUTHER BURBANK,
Santa Rosa,
Sonoma County, Cal.,
U. S. A.

Office and Residence, 204 Santa Rosa Ave.,
Cable Address : "Burbank, Santa Rosa, Cal."

My Grounds are Not Open to the Public.

INTRODUCTION.

TWELVE MONTHS HAVE PASSED since the first number of "NEW CREATIONS IN FRUITS AND FLOWERS" was sent out on its mission among dealers in trees and plants, great care being taken to confine it to the trade only; but before the few hundred first published were all delivered, orders came pouring in with each mail, like the falling of autumn leaves, for more, more; and again more had to be printed, and to this day the requests for "New Creations" are increasing rapidly, instead of diminishing, as it had been hoped they would.

Probably no horticultural publication ever created more profound surprise or received a more hearty welcome. Almost every mail brings requests for them from colleges, experiment stations, libraries, students and scientific societies in Europe and America, and it has been translated into other languages for foreign lands, even where it would seem that scientific Horticulture was hardly recognized; some asking for one, others for two or three, or a dozen or two or more. All these requests have been cheerfully responded to, but from this time on we shall be obliged to make a charge. We cannot attend to the ever increasing avalanche of letters which they occasion, a large portion of which are from amateurs, with long lists of questions, which would require years, perhaps a lifetime, to answer.

This ever increasing number of letters, which we have always carefully replied to (some twelve hundred to two thousand per annum), must be stopped, in part at least, else there will soon be no one here to answer them. We love to produce new fruits and flowers, and our heart is made glad beyond expression to know that our work is appreciated far and wide; but most of the *questions* which amateurs ask could better be answered by some horticultural paper, which would welcome them, or by the experiment stations, or by someone who has more leisure at his command.

Five years ago we sold out a nursery business which had been built up from nothing, and which was paying us fully ten thousand dollars a year, that we might give all our time and thought to the work of producing new fruits and flowers.

Do not think because they are raised in sunny California that they are less likely to prove generally hardy. Are those already before the public any less hardy or any less valuable than most of the Russian fruits which have been so extensively advertised for years? Are not the various Plums, Walnuts, Chestnuts, etc., which have been distributed from our establishment, proving to be *hardier* even than most of the Russian fruits, and more valuable in all other respects? But the *best* ones are yet to *come*.

About twelve years ago, when, having by thorough test found them good, we first commenced to introduce these fruits and nuts, sending circulars to most of the nurserymen in the United States, it was like trying to swim up stream in a rapidly flowing river, as very few had faith enough in them to invest in a tree; but those who were enterprising enough to do so, now find themselves fully prepared to supply the great and ever increasing demand which has followed, and are reaping rich rewards for the small investment of enterprise and coin which they then made.

What better gift has American Horticulture lately received than these fruits and nuts, and the greatly improved seedlings and crosses from them? And yet we have the fullest sympathy with all nurserymen who desire to introduce only those trees, fruits and flowers which have been widely tested, and which will prove better than any before known; delicious, productive, handsome, hardy and reliable in every respect. *We would very much prefer to have all our new fruits and flowers fully tested everywhere* and by everybody; but those who know the facts are too well aware that it would be a perilous risk or utter ruin to the originator, as a single bud or seed in the wrong hands may place an unscrupulous person on an equal footing with the originator, who may have spent worlds of patient thought and toil, during the few short years of the best of his life, in producing the beautiful creation. Having no Government aid or even protection, or college endowment to back us and to pay our bills, we must receive early returns, in part at least, for our tremendous expenses. Most of the horticultural world now knows that we would not send out a plant which was thought to be unworthy; else would the keenest and most level-headed business men—men who have built up mammoth horticultural establishments which are a wonder far and near—pay thousands of dollars for a single plant or tree which they had never seen, to one living in a far-off State or nation whom they had never met? as they have done in the past and will continue to do in the future, and with ever-increasing confidence.

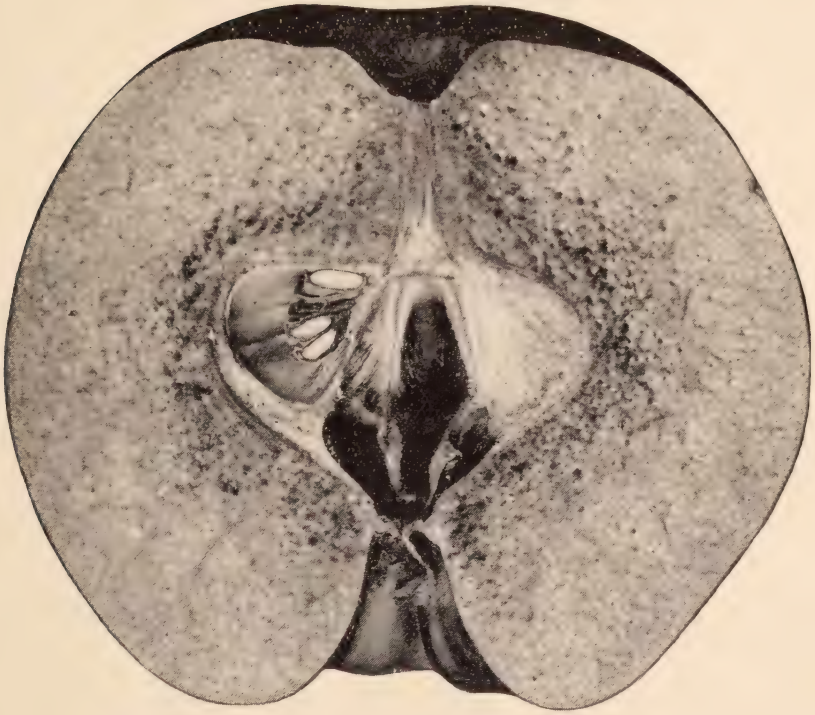
DO NOT IMAGINE that because the purchaser of the control of any of our new fruits and flowers happens to be so enthusiastic as to overpraise them, painting their virtues in far brighter colors than we have done, that the originator should be blamed. Great loss, vexation and disappointment come from *indiscriminate* and *unwarranted* praise. Indiscriminate commendation has a tendency to discourage all the honest efforts of originators who might, perhaps, otherwise receive some reasonable compensation for their labors. Purchasers will discover their real value sooner or later; and those who advertise discarded plants of ten or twenty years ago, find their business and reputation waning, as, in these days, people are becoming more discriminating, finding that everything labeled "good" or "bad" is not necessarily so because it is so labeled.

DO NOT EXPECT the *best* fruits of our labors to be put on the market *first*. Producing new varieties of superlative excellence is not a lottery, but a matter of many years of sincere study, and a more or less thorough, practical knowledge of the sciences as we find them to-day, which will require almost a lifetime to secure. Only the rudiments can be obtained from books; each one must work out facts for himself as he finds them indicated here and there. Imperturbable Mother Nature requires us to use our own mental search-light to guide the way, rewarding all earnest students and faithful workers without partiality to any.

In the pages following I give extracts from horticultural journals, letters, etc., so that all may know *what others say* in regard to my work and its results, both horticulturally and from an educational standpoint. *No one will question the sincerity or eminent ability* to judge of those whose words are quoted here and there along these pages.

"'New Creations in Fruits and Flowers' is a hybrid between a history of some of the most wonderful creations in fruits and flowers, delightfully told, and a catalogue beautifully gotten up..... All the descriptions have a sort of Arabian Nights' fascination about them, but they are fully endorsed by some of the most notable horticulturists in our country." —*Florists' Exchange.*

Quinces.



New Quince.

"No. 80."

QUINCE No. 80 is a seedling of Rea's Mammoth. I give a very accurate description of the *fruit* from the *Rural New Yorker*. The *tree* is about the same as Rea's Mammoth in growth and productiveness; the mildness and peculiar color of the fruit are remarkable.

"No. 80 is of a deep orange color in every part. Most quinces show *some* green. This is a uniform pure orange yellow. It is nearly round, measuring in one circumference 13½ inches around body, by 13¼ the other, *i. e.*, around calyx and stem. The calyx basin is deep,—over an inch,—and the cavity wide; the flesh somewhat plaited or corrugated about the top, which is about two inches wide. The stem cavity is one-half inch deep and one-half inch wide, making a regular cavity; the surface is undulating, though gently so. A beautiful fruit, flesh lemon yellow, not quite so tender as California, and not quite so juicy; it is a better keeper."

Stock on hand: One seven-year-old tree and a few grafts. Price, $600.

"Of great importance to nurserymen is the work of Luther Burbank of California. He is engaged exclusively in the production of fruits and flowers which are new in the highest sense of the word. It is wholly a private enterprise and the most extensive of its kind. The results of his work are of the greatest interest to nurserymen whose business it

is to propagate and disseminate, in large quantities, the new as well as the old varieties. Mr. Burbank has succeeded in improving the old varieties to almost as great an extent as in introducing new kinds. His work will continue to be watched with interest."—*The National Nurseryman.*

"Desultory and unscientific experiment will not answer. The subject must be pursued in a thoroughly scientific manner. The work is tedious and most uncertain at the beginning. All the processes, from the pollenizing of the flowers to the gathering of the seed, require the utmost care. Many of the fertilized flowers will fail to set seed, and then the fruits which contain the coveted seeds must be carefully watched throughout the season. It requires another year, sometimes many years, to produce plants from these, and the most careful investigation of their characters must be made. Sometimes the material produced will be too scanty to work with, and again it will be so abundant and will open out into so many directions, that a man with anything else on his hands will despair of exploring them all. No one can have too large a knowledge of horticultural varieties for this work; no one can have too profound a knowledge of plant-growth; no one can have too many appliances at his command to make the work efficient. It certainly is worthy of the highest skill and the closest application..... The extent of his work only shows how much must be done before one good variety can be brought forth; and how ardent must be the zeal which sustains any individual through long years of labor, expense and uncertainty. It can hardly be expected that many other persons will enter the field with so much enthusiasm, determination and ability."—*Garden and Forest.*

"Your catalogue has great interest in its botanical and biological aspects, as well as pomologically. I showed it to Prof. Brewer of New Haven, who made the first botanical survey of California, and he said he would ask you for one as a matter of scientific information." A. J. COE, Connecticut.

"The quinces are received in good order. I am simply amazed at your work. When I consider how hard I have worked and how little I have done, I cannot begin to understand how it has been possible for you to accomplish so much. For a time I could not but question whether your climate did not deceive you. There are too few to appreciate such work as yours." E. S. CARMAN, Rural Experiment Grounds.

"You have certainly been very successful in your work of producing new things of promise. I hope some of our Government Experiment Stations may be as successful in what they undertake." G. W. MCCLUER,
Agricultural Experiment Station, University of Illinois.

"While I have long been impressed with your work, I am now overwhelmed with the vast amount of good you have been able to accomplish. I respect your work above all that has ever been done for horticulture." WM. B. ALWOOD,
Horticulturist, Entomologist and Mycologist,
Virginia Agricultural and Mechanical College, Agricultural Experiment Station.

"'Catalogue of New Creations.' A remarkably unique catalogue issued by Luther Burbank, who seems to have devoted his life chiefly to the improvement of fruits and flowers. He has been eminently successful in this line, and we have here an illustrated catalogue of fifty-two pages, devoted wholly to the description of the more valuable of his productions. He does not sell them all singly, but offers the whole stock of each kind for sale at prices suited to the character of the new introduction. It is a particularly useful field to occupy, and one in which we believe Mr. Burbank stands alone."—*Meehans' Monthly.*

"A copy of your new catalogue came sometime ago, and it is of unusual interest. You occupy a position in the experimental world that is certainly quite unparalleled."

H. E. VAN DEMAN,
Chief of Division of Pomology,
U. S. Dept. of Agriculture, Washington, D. C.

"I look upon your results as the most palpable practical outcome of the Darwinian revolution in thought." DR. ROBT. H. LAMBORN, New York.

"Mr. Burbank is doing a stupendous, unequaled work. That any *one* man can do the work—nay, the tenth of it—that he seems to have done, passeth the understanding."—*Rural New Yorker.*

"Chestnuts received; they are certainly as sweet as the average American Sweet Chestnut." A. J. COE, Conn.

Plums and Prunes.

CROSS-BRED PLUM "WICKSON." (Life size.)

Cross-bred Japan Plum.

"Wickson." (See "Perfection" in NEW CREATIONS of 1893.

A YEAR ago I was convinced that this was perhaps the best of all the Japan Plums, and have yet no reason to change that opinion, only more than ever to admire the clean, sturdy, vigorous, upright growth of the trees, the pleasing light gray bark, the habit of ripening its wood hard to the very tip, its productiveness and the rare beauty and keeping qualities of its fruit, both size and quality of which have much improved since removing from the original hedge-row. The form has changed to be more generally obconical. It will probably prove hardy in central New York, and perhaps much further north.

I have been allowed to permanently name this fruit after my friend, Prof. Edward J. Wickson of the California State University, and author of "California Fruits and How to Grow Them."

There is wood enough now for twenty thousand grafts or half a million buds; and if not sold before September 1st, shall introduce it myself to the general trade. Price, $2,500.

"The new Japan Seedling Plum you kindly sent me was received in perfect condition. It was tasted by several of us, and we all pronounced it very delicious. I hope it may bring you an abundant reward, and prove a satisfaction to all who plant it."

M. CRAWFORD, Ohio.

"We thank you for your favor of the 18th. The box of Plums also came in same mail. They are certainly *very fine*. Should it prove hardy as Burbank, then surely you have a bonanza in Wickson."

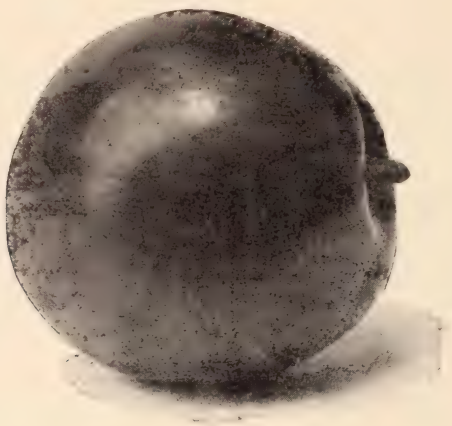
STARK BROS., Louisiana, Mo.

"Thanks for your letter and specimens. The Plum is grand."

(PROF.) E. J. WICKSON,
University of California, Agricultural Experiment Station.

"The California papers are describing a new Plum which Luther Burbank has temporarily named 'Perfection' (now permanently named '*Wickson*'), and which he produced by crossing the Japanese Satsuma upon the Kelsey. The fruit is almost the shape of an inverted pear, that is, with the stem attached to what corresponds to the blossom end of a pear. The amber-colored flesh is juicy and translucent, with a striking and agreeable flavor. The pit is small and shapely; the color deepens from a deep uniform cherry-red to a rich claret as it ripens, and when fully matured it is still in firm shipping condition."—*Garden and Forest.*

"Luther Burbank of Santa Rosa sends us a sample of what he considers the best new variety he has thus far obtained by crossing Plum varieties brought from Japan. The variety he has temporarily named Perfection, and it is a cross of the Satsuma upon the Kelsey. We commented favorably upon it last year, and the present sample strengthens the conviction that it will be a popular variety because of its strikingly handsome appearance and high quality. Its form suggests the Kelsey, but it is more symmetrical—in fact it is almost pyriform, inverted of course, for the stem is attached where the eye of the pear is found. Carrying its semblance to a pear shape further, we can say that it is almost identical with an inverted Doyenne du Comice. The color develops from a deep cherry-red down to a rich claret as the fruit becomes ripe. The coloring is uniform, and the fruit, from its firm shipping condition to its full ripeness, is even and handsome. In this respect it will be a great improvement upon the Kelsey. The flesh is of amber tint, very juicy and translucent; the pit is small and shapely; the flavor is striking and agreeable. From all the points of the variety, we anticipate its popularity as a dessert fruit for sale to distant purchasers, as it seems to have notable keeping qualities."—*Pacific Rural Press.*



Cross-bred Japan Plum.

"Prolific." (J.—3,972, in NEW CREATIONS, 1893.) October J. H. Hale.

The most productive of large, handsome fruit of any of the Japan plums, and the quality is not surpassed by any. In bloom and fruit all the branches are hidden from view, and yet, owing to the unusual vigor of the tree, it all comes to perfection.

The only objection to it was a few thorns, but these have almost wholly disappeared whenever it has been grafted. Its productiveness and the remarkable size and beauty of the fruit will make it exceedingly popular. From its appearance I judge it will be hardy as far north as New York and perhaps in central New England.

Stock: One large tree, one hundred large yearlings, and many strong top grafts. Price, $500.

"There are still better things in store for us in the progeny of these Japan Plums crossed with our native species and also with the European species. This promising work has already progressed far enough to show results, for there are a few new seedlings of this character now under trial. Foremost in this work is Luther Burbank of California. The catalogue which he has issued under the title NEW CREATIONS, is of unusual interest, as it contains descriptions of many things of this character. It should be read by every thoughtful horticulturist."—PROF. H. E. VAN DEMAN, in *Green's Fruit Grower.*

"S. D. Willard's talk on Plums provoked a long discussion in which there was a consensus of opinion that the Japan Plums are destined to work a revolution in the culture of this fruit. Mr. Willard said that Luther Burbank's experiments in crossing the Japan Plum with the native varieties promise to produce results far beyond anything yet obtained. Mr. Hale said that no fruit will give more satisfactory results for marketing purposes than Japan Plums. They are quick growers, quick and prolific bearers, are hardy, and the fruit is showy and of excellent quality."—*National Nurseryman.*

"J. H. Hale of Connecticut said, that for profit as a market fruit the outlook for the Japan Plums was wonderful. He believes that the planting of these plums, Abundance, Burbank and Satsuma, is the greatest of all horticultural openings of the present day. They are not tender; they are perfectly hardy; they are excellent shippers and long keepers. They are possessed of great beauty; their quality is fairly good except Ogon, which is a cross between a Kieffer pear and a cucumber in quality. The Satsuma is very good indeed. Plant these plums and reap great rewards. They will bear three years after planting and enormous crops."

"I consider the Burbank seedling the leading plum of the coast."
G. W. THISSELL, SR., Yolo County, Cal.

"The samples of plums are fine, especially A. P.—318. Quality superb."
STARK BROS., Mo.

"So far the newly introduced Japanese varieties show themselves very hardy, and productive beyond our powers to describe; while as regards productiveness, Burbank Japan excells them all. I have grown of this variety one hundred fruits to the square foot, while some branches producing this fruit, were making from two to three feet of new wood."
S. D. WILLARD, New York.

"These Japan Plums are certainly the coming fruit."
(PROF.) L. H. BAILEY, at Western New York Horticultural Meeting.

"Giant" Prune.

(A. P.—90 of 1893.)

Nothing need be said in regard to the size of this Prune—that is made sufficiently plain by the photographs; but besides its mammoth proportions it has a honey yellow flesh of remarkable sweetness, and so firm that it can be shipped six thousand miles in good condition. This is a case where great size and other rare qualities are combined in one fruit.

The tree is a strong, handsome grower, and the fruit is produced in the utmost profusion and of uniform size.

Good judges believe it to be the best shipping Prune in existence.

Stock: *Several thousand* yearling trees which are growing east of the Mississippi, so that any Eastern purchaser will have a good start *this season.* Price for all stock and control, $2,500.

If this is not sold before September 1st, I shall introduce it to the general trade myself.

"Yours of recent date at hand, also the fruit, which came through in good condition. I showed it to my friends the Maxwell Brothers, and we tested it together. They united in the expression that A. P.—90 was the finest Plum they had ever tasted. I thank you very much for these samples, which were really very nice." S. D. WILLARD, New York.

"We thank you for samples of fruits and photos. We cannot begin to express our appreciation and admiration. We only wish those fine fruits could be at an early date generally distributed and grown for the good of fruit growers and Horticulture in general."
STARK BROS., Louisiana, Mo.

"I was agreeably surprised by your kind favor of the 26th inst. last evening, together with a box of Plums, which arrived in perfect condition, and were shown to a number of fruit growers here, exciting many complimentary remarks and much surprise at the results of your cross-fertilization." T. T. LYON,
Pres. of Michigan State Horticultural Society.

"Samples of Plums came duly to hand. Have not sampled the quality, but the appearance is simply grand, particularly 'Golden.' We feel the greatest confidence that the 'Golden' should prove of unequaled value for all the Mississippi region where the *domestica* species are rarely successful." STARK BROS., Mo.

"GIANT" PRUNE. (Life size.)

"Honey" Prune.

A seedling of the well-known French Prune which it surpasses considerably in size of fruit, which is a handsome flattened ovoid in form; white, semi-transparent with a heavy white bloom. In honeyed sweetness, combined with a peculiarly attractive fragrance and flavor, it surely excels all other prunes or plums.

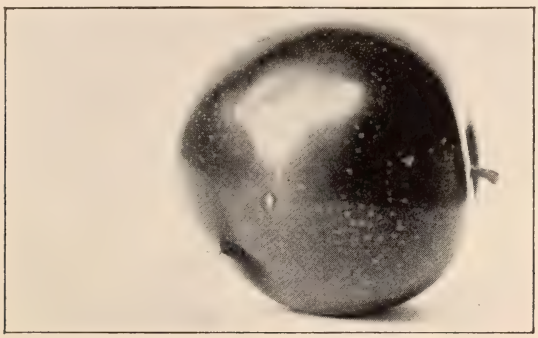
Stock: One-third of a small tree. Price, $300.

"The 'Honey' is an exquisite Prune; seems as though it might have some Jefferson blood, but is of even finer quality. The 'J.' ('Prolific') is also very fine, and seems to be an admirable shipper, being very firm." STARK BROS., Louisiana, Mo.

"Your kind letter of the 26th came duly to hand, also NEW CREATIONS which I am pleased to receive. I have frequently heard of the great pains you have taken to introduce and improve our fruit, and I ofttimes think that your labors, as well as others, are not half appreciated by the fruit growers of California. I am interested in your labor, and think I know how to appreciate it. Three years ago the Burbank Seedling came to my notice; I obtained a few grafts and gave it a fair test in this early locality; the result was, it turned out to be *very early*—ripened the 12th of June. I shipped three hundred and forty crates, the first ever shipped to the Eastern market—Boston and New York. In some instances they brought fabulous prices, and I feel confident there will be fifty per cent more trees sold this season than have ever been sold before. I have furnished thousands of buds during the summer, and have more orders for grafts than I care to let go. The California Red is only excelled by the Burbank, which stands at the head. I have the earliest, location on the Pacific Coast." G. W. THISSELL, SR., Yolo County, Cal.

"I congratulate you upon your success in so new and rich a field; may you have many years in which to broaden the world's knowledge." (PROF.) JAS. W. FORD, Minn.

"I have just received a copy of your NEW CREATIONS and hasten to thank you for it. It surely is a novel catalogue in every respect. I have been greatly interested and benefited in looking it over, and only wish I might see some of your interesting hybrids."
H. J. WEBBER, Asst. Veg. Pathologist,
U. S. Dept. of Agriculture, Subtropical Laboratory, Fla.



New Plum.

"Doris."

A seedling of Satsuma which grows as readily from *cuttings* as a Quince or Currant. The tree is exceedingly vigorous and often bears fruit the second year from cuttings, and afterwards the branches are ropes of fruit which is quite soft, juicy, sweet and of good quality; for eating fresh, perhaps it would average up well with most good plums.

It is a Plum for *everybody*, as it can be raised so easily, and it makes a *first-class stock* for budding other varieties on, far excelling the Mariana here. It should be hardy as far north as Ohio at least.

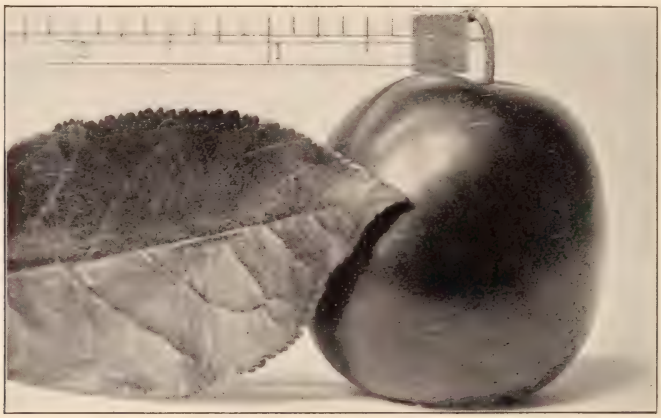
Stock: Many fine large trees. Stark Bros. have a half interest in it. Price of the other half, $300.

"I am now satisfied that the Burbank and your Japan Walnuts will winter all right here without protection, as the past winter has been the most severe on tender fruit in twenty years, so Prof. Budd writes. My little Burbank grafts are loaded with fruit, and I think will ripen up, so if you have any varieties of Plums you think as hardy as Burbank, I should like to try them." DR. A. B. DENNIS, Iowa.

"I am an admirer of your 'Burbank' Plum. I have about three hundred and fifty growing now, and expect to set out more the coming year. I raised, or rather, the trees produced, samples measuring six and one-fourth inches in circumference this season."
ANDREW RYDER, Placer Co., California.

"The Burbank Plums bore heavily this year; they are simply superb; those who have eaten the fruit pronounce it magnificent." H. E. GOODRICH, San Diego Co., Cal.

"The Burbank Plum you sent me for testing some time ago has proved such a success here that it seems to me there must be more where that came from. What will you have for next year that I can secure for testing here? I am anxious to introduce more of your good things here." JAMES TROOP, Purdue University,
Agricultural Experiment Station of Indiana.



CHICKASAW DOMESTICA HYBRID. (Large and handsome, but not productive.)

"The Burbank is the most celebrated of all our importations. After a thorough trial we pronounce it to be the best and most valuable fruit introduced to these colonies and the most profitable that can be grown. The tree, though an enormous bearer, is at the same time a most vigorous grower. The fruit is of the largest size, best flavor, most handsome appearance, and very much superior to all other Japanese Plums. We have fruited the Burbank for three years; one three-year-old tree growing in our nursery this autumn produced over twenty pounds of large, handsome fruit, some specimens measuring seven (7) inches in circumference. Visitors to our nursery were amazed at the marvelous sight and agreeably surprised at the splendid flavor of the Burbank. Those who came prejudiced against Japan Plums altered their opinion at once." D. HAY & SON, Auckland, N. Z.

"The most important conclusion at which I have arrived is that the mere act of crossing does no good. The good depends on the individuals which are crossed, differing slightly in constitution, owing to their progenitors having been subjected to slightly differing conditions, or to what we call, in our ignorance, spontaneous variation."
—Darwin.

"Every man has his own vocation. There is one direction in which all space is open to him. He has faculties silently inviting him thither to endless exertion. He is like a ship in a river: He runs against obstructions on every side but one; on that side all obstruction is taken away, and he sweeps serenely over a deepening channel into an infinite sea." *—Emerson.*

Berries.

Cross-bred White Blackberry. Jackson & Perkins.

"Iceberg."

OWING to the somewhat unsatisfactory qualities of the White Blackberries so far known, the impression may have been entertained by some, that no White Blackberry *could be* as productive and hardy, with berries as early, abundant, large, handsome and delicious, as the best black ones.

The well-known Lawton is, when ripened, unsurpassed, and very generally known as the most productive market berry. Owing to its fixity of race, it will reproduce itself from seed almost exactly, and its seedlings will not be influenced, when raised from seed pollenated by other varieties, but readily imparts its good qualities when employed as the staminate parent. One of the great grandparents of "Iceberg" was Lawton. The first generation of seedlings, when crossed with Crystal White, was all black; the second also, though varying much in other respects; but the third produced this wonderful plant, bearing the snowiest white berries ever seen.

Very little attention was paid to the long rows of cross-bred descendants, until one day this berry was discovered, among its black relatives, with the canes bending in various directions with its load of delicious, snowy berries, which are not only white, but so transparent that the seeds, which are unusually small, may be seen in the berries when ripe.

Clusters, larger than those of Lawton; berries, as near as could be judged, were at least as large, earlier, sweeter, and more tender and melting throughout, though as firm as Lawton is when ripe.

Stock: One large bush, now divided into three, and three hundred strong plants from root cuttings. Price, $2,500.

"I can still see in my mind's eye those magnificent hybrid berries in your experiment grounds, but I feel that I cannot fully appreciate your work, for it would take weeks, rather than hours, to give the experiments the careful inspection which they deserve."

(PROF.) EMORY E. SMITH,
Leland Stanford Jr. University, Cal.

"We are very glad, indeed, to receive your new catalogue, and note with interest the results already attained in your great work." STARK BROS., Louisiana, Mo.

"Santa Rosa is being advertised to the world in many ways, in none more than its fruits and flowers. Its godmother, the beautiful Limenian saint, Santa Rosa, it seems, has not forgotten her nursling. We allude to the astonishing developments in plant and fruit hybridizing by our fellow-townsman, Luther Burbank, who has the largest horticultural experiment grounds in the world. He sells the best outcome of his work, all the plants of a new variety, for a high sum, and after a while we will be buying some of his productions as approved staples, and planting them around the nursery in which they had their origin."—*Santa Rosa Democrat.*

"Luther Burbank is at present engaged in the production of new varieties of fruits and flowers by combining native forces, guided by long and carefully conducted study and observation in biology. The results of his labors must be of great benefit to the nurserymen of this country."—Correspondent *Florists' Exchange.*

"We received your splendid catalogue, and congratulate you upon your wonderful creations." D. HAY & CO., Auckland, N. Z.

NEW WHITE BLACKBERRY "ICEBERG." (A shade over life size.)

Blackberry-Raspberry Hybrid.

John Lewis Childs.

"Humboldt." (V. C. 18,234 of 1893.) Phenomenal

(For general description see NEW CREATIONS for June, 1893.)

This berry, when not cooked, is too acid for most tastes, but is always praised beyond any words I would care to use in describing it, as someone might be disappointed. I will say this much—a more delicious berry for canning or drying has never been introduced; the most exquisite flavors of both Raspberries and Blackberries being combined and itensified in it.

The photograph is not quite life size. Stock on hand: One very large plant (vines fourteen to sixteen feet long), fifty two-year old plants and some two hundred strong rooted tips. Price, $850.

"Fred C. Smith, Horticultural Commissioner for the South Australian Government, accompanied by Wm. Brooke, also of Australia, and Mr. Cillie of South Africa, spent Tuesday in this city. One of the chief objects of their visit was to meet Luther Burbank, who is one of the best-known horticulturists. Mr. Smith says his works are extensively read in Australia, and are looked upon as eminent authority. He was as much pleased with the man as with the author."—*Santa Rosa Democrat.*

"PARADOX."

Blackberry-Raspberry Hybrid.

"Paradox." (For history and description see NEW CREATIONS for June, 1893.)

The plant is very productive of most delicious crimson berries, especially valuable for home use as they are not as firm as most Blackberries, being more like average Raspberries in that respect. The flavor is exactly balanced between Raspberries and Blackberries, as are all other characteristics of the plant. The berries improve in size as the plant grows older. Price, $800.

"I beg to thank you for the catalogue of NEW CREATIONS and for the information as to the disposal of your two Quince varieties. I have written to each of the purchasers. I hope the other marvelous productions have fallen into good hands, and that we shall hear of them as soon as they are put on the market. One can but wonder as to the possibilities of many of your combinations." A. WOODROFFE, Auckland, N. Z.

"HUMBOLDT." (Slightly less than life size.)

"We have never received a catalogue so interesting as yours just received. Were we doing a large business we would certainly invest in some of your new fruits. The Burbank Plum is good enough for us. We are raising considerably more of it this year than of any other variety. There is a wonderful demand for it here."

RAMSEY & CO., Burnet Co., Texas.

"We are in receipt of your catalogue, for which accept our best thanks. On perusing it we were not only delighted but astonished."

C. S. MCDONALD & SON, Auckland, N. Z.

"The Gladioli received by me last spring fully supported your claims for them. Thanks for your catalogue. It is a revelation to me."

H. H. GROFF, Ontario, Canada.

RUBUS CAPENSIS. (See next page.)

Rubus Capensis.

This peculiar berry-plant came to me by way of New Zealand from South Africa, and is probably the one that Stanley speaks so highly of as growing in places on the Dark Continent. The canes grow to a height of six to ten feet, bending over and rooting from tips like Black-cap Raspberries. The whole plant is covered with a short, rusty down, and few short scattered prickles; the fruit is fully as large or larger than Shaffer's Colossal Raspberry, of a purplish wine or mulberry color, and of excellent quality, though the berries do not separate from the receptacle as freely as they should; it is a very promising berry-plant. None for sale except the whole stock, consisting of some one hundred and fifty or more large two-year-old bushes. Price, $300.

"From the introductory remarks in your catalogue NEW CREATIONS just received, I must believe that it is sent to me purposely, and hence that courtesy requires an acknowledgment. I have read it and have examined the photographic reproductions with much care, and I can say that I am agreeably interested. Some of your statements come within my experience; others go far beyond. I, however, see nothing theoretically impossible in your claimed results. In experimenting with hybridizing, there is a whole vista of good things always in the prospect, and a life-study, almost, in the interesting results. I thank you for the catalogue." (DR.) E. LEWIS STURTEVANT, Mass.

"NEW CREATIONS IN FRUITS AND FLOWERS is the title of a remarkable and unique catalogue. For many years, Luther Burbank—a name familiar to potato growers—has been experimenting in the production of fruits and flowers from seeds, by selection hybridization and cross-pollenation. He has now the greatest horticultural grounds in the world. The fruits and flowers mentioned are the best of millions of seedlings; some of them are marvelous; they are not simply new varieties, but new creations; he has obliterated the lines between species and produced hybrids between different species—heretofore considered impossible. Mr. Burbank is an originator in horticulture, and a genius in his line, but he is not an introducer. Whatever he produces of special value is offered for sale to nurserymen, and will in due time reach the public through them. This catalogue is not for public distribution. He is a busy man, intensely in love with his work—a work which must not be interrupted."—*Farm and Fireside.*

The photograph on the opposite page shows a sample pile of brush twelve feet wide, fourteen feet high, and twenty-two feet long containing 65,000 two and three-year-old hybrid seedling berry bushes (40,000 Blackberry X Raspberry hybrids, and 25,000 Shaffer X Gregg hybrids) all dug with their crop of ripening berries.

This photograph is introduced to give a more correct idea of the work necessary to produce a *new race* of berries of superlative excellence. Of the 40,000 Blackberry-Raspberry hybrids of this kind, "Paradox" is the only one now in existence. From the other 25,000 hybrids, about two dozen bushes are left for further trial, but from these selected ones, wonderful new berries are appearing whose forces are so fixed in the right direction that they generally produce good and productive seedlings. This pile of brush cost in coin something like $700, and is one of fourteen similar piles which were cremated on one of my places last summer.

"In this connection we wish to say, as we have already tried to express to you, that our high opinion of your work and consideration of your wishes in connection with the introduction of your new fruits, would lead us to suggest that you prepare just the descriptions you would like us to use in introducing them. Possibly there will be some alterations or additions to the descriptions you give in your latest catalogues. In any event, be sure our inclination is not to introduce with any tinge of the customary exaggeration given new fruits. Any points you can give us from time to time will be greatly appreciated."

STARK BROS., Louisiana, Mo.

"Luther Burbank of California has done more for this race (Gladiolus Gandavensis) than any other man living. He found that the petals of most of our varieties were too thin for the California climate, and would wilt too soon. By raising and saving seed of the best, and repeating this process over and over, he finally succeeded in producing a strain with thicker petals and dwarfer growth, with all the beautiful colors of this race. This is all he claims and he is not mistaken." M. CRAWFORD, Ohio.

Lilies.

SEARCH this earth all over; climb every mountain; plunge into every canyon, valley and jungle; and, when all this is done, visit every park, garden, nursery and conservatory; go anywhere, everywhere, and as many varieties of charming *lilies* cannot be found as I have produced. All the earth is not adorned with so many new ones as are growing at my establishment.

My lilies are growing on two places—one eight, the other ten miles (by a dusty road) from any photographer; and during the very warm weather when they are in bloom, it is exceedingly difficult to bring them so far, in good condition, for photographing.

One foggy morning last summer I succeeded in getting a few blooms over in presentable shape; they are shown on the next two pages. As the fragrance and colors could not be photographed, an attempt is made to convey a mental photograph of some of the points of those here represented. One is white; another, pale straw or creamy white, with thick, recurving, channeled petals, studded with numerous papillæ, with light yellow anthers; another is perfectly green throughout, in appearance very much resembling a Trillium; some are Tigridia like; others open their petals in such a curious manner that the flowers resemble Sprekelias in form; some are crimson and yellow, or darkest orange yellow with leopard spots, or plain. Many grow six to eight feet high, others, only six to eight inches; about one-fifth are fragrant, some slightly, others powerfully so; some bear only two or three flowers to each stalk, while others have twenty to fifty or more.

The broad or narrow, long or short leaves, are light or dark green, and sometimes beautifully striped with white; some varieties have *branching stems*.

The bulbs are almost as much of a study as the flowers. Some have flat, thin, open scales like a rose or clematis flower; others have close, thick, incurved scales, some many jointed, others entire and some crenated; a few with pink or red bulbs, but oftener yellow, orange, or white, some of which are nearly globular, others conical, pyriform or flat; some throw out numerous long moniliform underground runners; some varieties have a tendency to start early, others late.

Though not having a very large stock of some, yet the number of varieties being so great, I will offer the control of some very handsome, hardy ones at from $250 to $10,000 each; and, having a multitude of other new things to absorb my attention, will offer *all these lilies* to any responsible party or parties for $250,000, including all unbloomed hybrid seedlings and all the hybrid seed produced this season: this offer holds good only to November 1, 1894.

Lilies are generally quite hardy, as they came into existence through the necessity of protecting themselves against seasons of severe freezing or later, modified, perhaps, in a few cases by being subjected to long seasons of fierce heat and drought.

HYBRID LILIES. (Much reduced.)

HYBRID LILIES. (Much reduced.)

Nearly all my new lilies are crosses of parents selected for health, hardiness, *easy management* and *rapid multiplication*, as well as fragrance, beauty of coloring, grace and abundance of flowers; all will thrive and increase rapidly where almost any lily will grow. In these hybrids a broad foundation has been laid for endless variations which will reward lovers of flowers for ages to come.

"I am greatly delighted to know that you have so many new lilies coming on; they are to me the great attraction of California, and I would go further to see them than any of the other products of the State." M. CRAWFORD, Ohio.

"I have received your pamphlet descriptive of some of your remarkable productions. I thank you for your courtesy, and have read the pamphlet with more interest than I ever felt in any other horticultural publication. I shall esteem it a great kindness if you will send me your following publications." W. E. ENDICOTT, Mass.

"Another reason why I am a champion of new fruits is that the originators must have encouragement. As a rule, men who originate new fruits are very poorly rewarded for long years of experimentation. If no one becomes interested in their productions after they have secured them, certainly originators would cease to exist. Have I not said enough to encourage the reader to believe that the introduction of new fruits is a blessing to mankind?" —*Charles A. Green, in Farmers' Home.*

"The trouble is not so much that novelties are unworthy as it is that they are recommended promiscuously, and that their particular and distinctive merits are not discovered. I look with suspicion upon all those which are recommended indiscriminately, indefinitely, generally and for everything, and equally for all regions, because their descriptions cannot be truthful, and cannot be founded upon experience. I believe that the time is now at hand when a man can establish a more lucrative nursery or plant business by giving his novelties careful and discriminating tests, and by telling what they are not good for as clearly as he tells what they are good for, as he can by possessing himself of the desire to introduce a certain number of novelties each year and to paint them in such faultless colors that every thoughtful man knows that they are false." —*Prof. L. H. Bailey.*

"No seedsman worthy the name would offer as a 'novelty' a plant or seed unless it had some points of value not already possessed by others. However much he might make from the sale of such at the start, a business built up therefrom is short-lived; beside that, the legitimate seedsman takes a great pride in his business reputation. He wants to have the seeds he sells prove just what they are represented to be." —*Florists Exchange.*

"You who read these lines may consider that we are making progress slowly. But if you will remember that it has taken some twenty million years for the improvements of new fruits to reach the standard enjoyed when you were a boy, you will realize that the improvement has really been more rapid recently than in any other period of the history of the world." —*Chas. A. Green.*

"An occasional and slight change in the conditions of life is beneficial to all plants and animals; but the offspring from a cross between organisms which have been exposed to different conditions profit in an incomparably higher degree than do young or old beings from a mere change of their conditions." —*Darwin.*

Clematis.

This season I have the pleasure of offering a *New Race* of Clematis, produced by crossing the graceful coral-scarlet (Coccinea), and the bell-shaped Crispa (Blue Bells).

The plants grow almost as vigorously as Hop Vines; the leaves are extremely gracile and handsome, and the profusion of flowers—from June till frost—exquisite in form and color, most of them being rather broadly bell-shaped, with an exquisitely beautiful frosty or snowflake appearance, with a blending of colors and shadings which cannot be found elsewhere in the whole Clematis family.

CLEMATIS. (Sample blooms of the new race.)

"Snowdrift." Jackson & Perkins

A pure double snow-white; the vines during the spring and early summer are literally covered with flowers; it has not, so far, bloomed in the fall here, but would, no doubt, in a climate where summer rains occur, or if watered. Five large clumps. Price, $300.

"Ostrich Plume." Jackson & Perkins

A large white flower, variegated with light blue; the soft, feathery appearance of the flowers has not, as far as I can learn, been equaled, and who has ever seen one more perfectly double? One strong clump. Price, $250.

"Waverly." Jackson & Perkins

A clear sky-blue seedling of medium size; the sepals are pleasingly undulating, while the flowers are symmetrical and handsome, both in bud and bloom. One strong clump. Price, $200.

Double Clematis.

Jackmanni-Lanuginosa Types.

"SNOWDRIFT."

"Ostrich Plume."

"Waverly."

Besides those named in the preceding page, I have about a dozen new *double* seedlings of various forms and colors, and some single ones with *largest flowers* and unusual colors and habits of growth, some of them far excelling any now known in cultivation. Prices, from $100 to $300 each variety.

The cuts of the Double Clematis are about three-fourths life size.

"Allow me to thank you most heartily for a copy of your unique presentation, NEW CREATIONS IN FRUITS AND FLOWERS. It is a rare, rich feast, and I congratulate you upon your marvelous accomplishments." (PROF.) T. V. MUNSON, Texas.

"I thank you for a copy received of your pamphlet titled, NEW CREATIONS IN FRUITS AND FLOWERS. It is exceedingly interesting and I prize it."
G. C. BRACKETT, Sec. American Pomological Society.

"I am well pleased with your strain of Gladiolus. In my opinion it is the most desirable that has been put on the market for many years. The Lemoine varieties are weak in several respects. But few flowers open at the same time, and the spikes are greatly inclined to be crooked. The Nancieanus are not vigorous growers, the petals are too thin, and too few open at a time. The Childs are good growers, very large, but nearly all red and too thin. The Gandavensis seed from Germany is not surpassed for good colors, but it has not the substance of the California strain received from you. Many a time have I thought of you and your Lilies. I would very much rather have seen them than the World's Fair, but it was not convenient to see either. Wishing you many years to spend in your good work, I am yours truly." M. CRAWFORD, Ohio.

"I received your catalogue some time since and have been reading and re-reading, and wondering at your *Creations* in which I am greatly interested. I did not suppose there was a man in the world who had given the time you have to the intricate work of improving and hybridizing fruits and flowers that you have done." CHARLES MILLS, New York.

"Your approval of my long conviction that environment is likely to exert a modifying influence upon the character of the incipient plant, carries the greater weight with me from your wide experience in such matters. Trusting that you will reap ample returns from the fields in which you seem to be almost the sole laborer."
T. T. LYON, Pres. of Michigan State Horticultural Society.

"There is located at Santa Rosa, California, the greatest horticultural experiment farm in America, if not in the world. On this farm of about fifty acres, Luther Burbank is devoting his attention to the production of new varieties of vegetables, fruits and flowers, with remarkably successful results, and it is by means of hybridization that the results are accomplished." H. C. C. MILES, before Connecticut State Board of Agriculture.

New Calla.

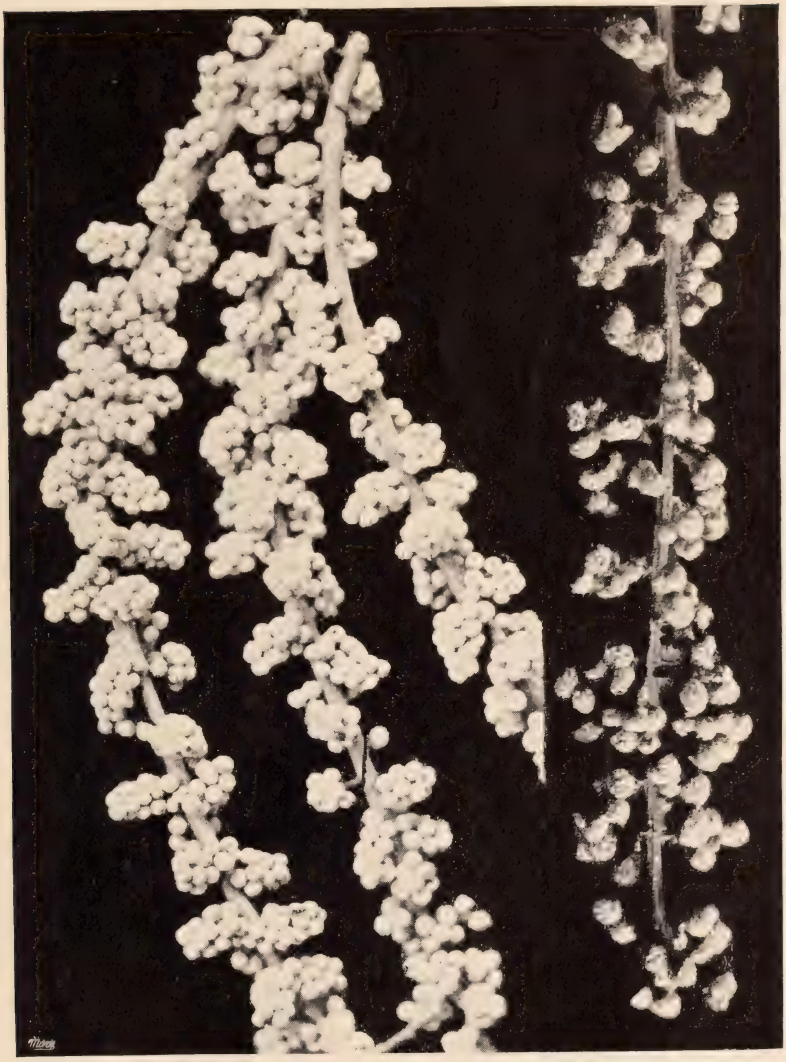
"Snowflake."

"SNOWFLAKE." "ELLIOTT'S LITTLE GEM."

SNOWFLAKE. (Exact life size.)

On this page Elliot's Little Gem and the new "Snowflake" Calla are shown, both being grown under *exactly the same conditions:* the flowers, leaves and plants of this new Calla *are not nearly half as large* as the "true Little Gem," as may be verified in part by the accompanying photographs; the leaves of "Snowflake" differ in shape from all the other Callas, the lobes being more rounded as may be seen by the lower (life-size) photograph. Last season there existed but *one* plant and some bulblets; this season I have *one hundred* large healthy plants. Has the full control of such a floral gem ever been offered? Price, $2,000, which will be most cheerfully refunded—all plants to be returned—if it proves to be *half as large* as the "true Little Gem."

See also page 38 in NEW CREATIONS for 1893.



Hybrid Wax Myrtles.

In the accompanying photograph the single branch at the right is the California Wax Myrtle *(Myrica Californica)*, which is an upright, compact, growing tree,—the trunk often attaining a diameter of one to two feet,—with fragrant, dark, evergreen leaves.

The three branches shown at the left are of an improved variety of the Eastern species *(Myrica cerifera)*.

The wax produced by the Eastern species is of a pale green color ; that of the Western species is purplish.

From the thousands of young hybrids which I have growing, a variety of value may be confidently expected.

New Calla.

"Fragrance." John Lewis Childs

The common Callas are destitute of any odor, except once in a while a seedling, which gives a faint odor of muriatic acid or a toadstool. Last summer, while critically examining a block of Little Gem Calla seedlings, I was surprised by a fragrance resembling that of Violets or Water Lilies; as I had long been seeking a fragrant Calla, the one producing the perfume was soon found.

This season "Fragrance" has proved itself constant in producing its pleasant perfume. The plants are a little more robust and of about the same general appearance as Little Gem, producing flowers as abundantly as any Calla known.

"I have examined with much pleasure your catalogue of new creations in Horticulture. Your results may be called marvelous, and they put our experiment stations to shame. I have endeavored to do some work in cross-fertilizing plants, but find the limited time at my command at the season of the year when this work must be done, a very serious trouble. While I am half tempted to be jealous of your success, I must extend to you my sincere congratulations for your wonderful results." PROF. E. S. GOFF, Madison, Wis.

"Allow me to thank you for your catalogue of NEW CREATIONS IN FRUITS AND FLOWERS. It is the most interesting catalogue I have ever received. Every one of your new plants is a monument in your honor." PROF. C. C. GEORGESON,
Kansas State Agricultural College.

"I am your debtor for a copy of your NEW CREATIONS IN FRUITS AND FLOWERS just received. Much as I had heard of your operations in this new and comparatively unoccupied field, I was by no means prepared to expect such a breadth of operations, such breaking up of our old-time ideas as to the possibilities therein, and such wonderful results as are revealed in your catalogue. I have quite a number of your earlier "creations" on trial here, several of which I hope to fruit this coming season; and if at any time, or for any reason, you may wish to test of any of your productions in so remote a locality, I will be most happy to serve you in this way." T. T. LYON,
Pres. of Michigan State Horticultural Society.

"Results are problematical, but there is certainly great room for improvement in our blackberries and raspberries. There is entirely too much seed for the amount of flesh. When we consider that our apples originated from a crab in no way superior to many of our own native wild crabs, and the excellence that has been developed by cultivation and selection, what may we not expect from our raspberries and blackberries, which are so much better naturally?" BULLETIN NO. 21, Illinois Agricultural Station.

"Professor Bailey was fully prepared to say he believed there was nothing random in Nature. Wherever a variety of plant was got it came from some law which to them might be unknown, and it should be their purpose to find out those laws that governed the selection and improvement of plants."

"Varieties improved from man's point of view must receive kind treatment and richer food than wild forms of the same plant. The cultivated plant, like the domesticated animal, yields in a measure its powers of self-defense to adapt itself to our service. Man must in return provide for its safety and nourishment. In the improvement of plants the action of man, much like influences which act on plants in the wild state, only brings about slow and gradual changes, often scarcely noticeable at first. But if the efforts toward the desired end be kept on steadily, the changes will soon become greater and greater, and the last stages of the improvement will become much more rapid than the first one." —*Vilmorin.*

Plate showing how widely the seedlings of *Pyrus Japonica* vary in fruit. The various forms, sizes, colors, and the curious marking, dotting, spotting and shading of the fruit are remarkable. A species so variable and with so many possibilities in the way of acid, should produce some valuable varieties.

THE NEW ROSE "PEACHBLOW." (About half life size.)

"PEACHBLOW." (Nearly life size.)

New Rose.

"Peachblow." Sunset Seed Co, S. F.

Described last season, but must be seen to be appreciated. The photographs give no intimation of its rich peculiar shadings. Fifty large bushes. Price, $300.

"I part with you on the seed-testing question with considerable sorrow, both for the extremely pleasant relations that have always existed between us, and because I have been able to avail myself of your expert knowledge, which I do not anticipate finding when I look elsewhere. I have never found anyone besides you that I could rely on for testing seeds." E. J. BOWEN, San Francisco, Cal.

One of the four Nuts, the first ever produced by eleven large Californica X Regia hybrid trees. These nuts, as would be expected, are a complete combination of the two species in every respect; one was tested, the others planted, and variations are now in order.

The berry-plants have now been sifted down to about 50,000 kinds; it will require another season to select and definitely decide which are the *best*. Among them are many promising ones which are absolutely free from thorns. It will also be best to expect some new hybrid plums and other fruits, and among flowering plants some new types of Lilies, Tigridias, Amyrillis, Callas, Clematis, etc., etc., which will be entirely out of the usual line.

The novelties mentioned below, which were described in last catalogue, remain unsold:

The two hybrid Walnuts.
Purple leaf hybrid Plum, **"K. P.—193."**
Seedling Raspberry, **"October Giant."**
Hybrid Blackberry, **"Autumn King."**
Calla, **Variegated "Little Gem."**
Calla **"Giant."** About fifty large strong plants.
Calla, **"Golden Variegated Albo Maculata."**
Myrtle, **"Argentina."**
Poppy, **"Silver Lining."**
Tomato, **"Combination."**

"Without the resolution in your hearts to do good work so long as your right hands have motion in them, and to do it whether the issue be that you die or live, no life worthy the name will ever be possible to you, while in once forming the resolution that your work is to be well done, life is really one, here and forever." —*Ruskin.*

"MY DEAR BURBANK: Your NEW CREATIONS IN FRUITS AND FLOWERS for June, 1893, received. Although I knew you had been experimenting in hybridizing with more or less success for years, I was not quite prepared for the revelation unfolded by the book with its illustrations. I congratulate you on these triumphs. As an old friend I share with you the feeling of honest pride in your benefits conferred on Floriculture and Horticulture. I am glad I had the discrimination to place you on the Board of Trustees for the Botanic Gardens, and I am sure your co-trustees will share with me the feeling of satisfaction."

J. B. ARMSTRONG, Cloverdale, California.

Col. Armstrong is the one who donated to the State of California about eight hundred acres of the finest giant Redwood forest hill and dale for a botanic garden, and has since bestowed upon it a permanent endowment for its preservation and improvement. The picturesque scenery and natural advantages of this great tract are varied, and will give the opportunity for all time to those who would see the primeval grandeur of the Redwood forests which are fast passing away.

"We cannot say enough in praise of the Burbank Plum; it is superior to all other varieties; the most fastidious cannot find fault with it. This is without doubt the best and most profitable Plum in cultivation." D. HAY & SON, Auckland, New Zealand.

IMPROVEMENT OF CEREALS.

Grain crops may, like most other plants, be improved in various ways, and the improvement often is so marked as to distinguish the product as an entirely new variety. This is especially not infrequently the case when a cross of different varieties has taken place, either accidentally or by judicious selection of parent plants, the stigmas of the flowers of one chosen variety being fertilized with the pollen of another, taking precaution to prevent self-fertilization. This method of improving grains or other plants requires a great deal of skill, care and patience, and even when these conditions have been combined, the result will be uncertain. And even in the most favorable case several generations of cultivation, selection, and often repeated and various crossings are required before a new and improved variety can be established. Hence it will be understood that this method of improvement is rather out of the way of the general farmer, and must be left to the experts, who will be more likely to fail than to succeed. No wonder that very high prices are paid for new varieties of seeds and grains.—J. PEDERSEN-BJERGAARD, Denmark, in *American Agriculturist.*

"The good will survive; the worthless will go under. Business tricks may help for a time, but honesty will prevail." —*Fred Dorner.*

View in Sunny Land, near Santa Rosa.

"No limit can be fixed as to the improvements which may be expected from care, thought and selection. The gains of the last dozen years may surely be taken as the forerunners of better things. It is clear that no very important additions to our cultivated plants are to be expected now from the discovery of new species, but an unlimited field opens before the raiser of new and improved forms in all our garden flowers, and in fruit and vegetables."

HENRI L. DE VILMORIN.

BLACKBERRY LEAVES: showing the strange variations sometimes produced after two or three generations by crossing different species; some of the characteristics of either parent being intensified in some of the plants, even when the seed producing them comes from one individual plant, and possibly from the same berry.

PRESS OF
H. S. CROCKER COMPANY,
SAN FRANCISCO

"Wonderful acquisitions that the world of horticulture will long remember."—D. H., Auckland, New Zealand.

"Of stupendous value to the horticultural world."—L. H., Waikoniti, New Zealand.

"A wonderful work amidst plant life."—H. P. S. Ngadiloweh, Kedirie, Java.

"A wonderful work."—N. O. H., Stockholm, Sweden.

···THE··

1898

SUPPLEMENT TO

NEW CREATIONS

IN

FRUITS AND FLOWERS

"The man who has done more to give the world some idea of the possibilities of Nature's work in the world of horticulture than any other of the great scientists of the age."—Santa Rosa *Republican*.

"The statements made to the number and variety of Mr. Burbank's productions are so astounding that some might be supposed to consider them as so many flowers of rhetoric, such as we are accustomed to from the other side of the Atlantic, were they not authenticated by competent observers of established repute."—*Gardeners' Chronicle*, London, England.

"Not Ruskin, perhaps, nor Tolstoi, with all their love and study of human nature, has learned a deeper wisdom than has come to this patient, studious man who has given his love to the strange, silent forms of life we call vegetable, and which play their parts so quietly that to many they are insignificant and half forgotten."—San Francisco *Examiner*.

"The Edison of horticultural mysteries."—San Francisco *Call*.

BURBANK'S EXPERIMENT FARMS,

LUTHER BURBANK,

Santa Rosa, Sonoma County, California, U. S. A.

Office and Residence, 204 Santa Rosa Ave.

How to Judge Novelties—Look to Their Source.

In distributing this brief list of new fruits and flowers we will ask if it is not a very significant fact that the new creations which have gone out from our establishment have always received the utmost favor with the growers, dealers and consumers everywhere, a large portion of them becoming in time the recognized *Standards of Excellence*, and greatly extending the areas of successful culture.

They are all carefully tested, not with a few others, but with tens of thousands, and in many cases with hundreds of thousands of their kind. From this vast number to judge by and select from, none but those of superlative excellence are ever placed before the public, and these, instead of receiving the fate of a large share of the so-called "Novelties"—early oblivion—are, as each season passes, growing very rapidly in favor, and a great and ever increasing volume of gratitude and thanks are coming to us from all lands for helping to make the very best of fruits and nuts an every-day food for all instead of an expensive luxury for the few, and for new trees, shrubs, flowers, grains and grasses which have awakened new thoughts of the possibilities of scientific horticulture and of man's power to coax nature to produce another Eden.

The time, the care, and the expense of producing these new fruits and flowers is simply astounding to those not familiar with the facts. They are usually *offered ONCE ONLY*, all the main financial profits being secured by the early purchasers and planters. If in the past we had received only *one cent* for each ten thousand dollars added to the wealth of the world by our plant productions, those mentioned in this list could be pased out freely to all who ask, but no great undertaking can long exist without some provision for running expenses, therefore the prices accompanying this list.

Thousands of correspondents imagine that this is a Government station, sending orders for our "bulletins," asking endless strings of questions and innumerable favors, all of which are complied with when anywhere within the bounds of reason or common sense.

We have no Government aid, no college endowment, and nothing whatever to keep up the work except the occasional sale of these new fruits and flowers. Widely known experts in law, medicine or any other profession require a fee of from $10 to $500 for their written opinion, and we are often advised to adopt the same means to protect ourself from so much unnecessary correspondence, which is our greatest burden. Most of the questions could be answered quite as well by some of the United States Experiment Stations, which have been established and are supported by the Government for this very purpose.

"The originator of a new plant or fruit should have the same protection as other inventors. It takes years before their merits are known, and the skill, trials, difficulties, patience, labor, expense and perseverance are wholly unrewarded, for as soon as it is once sold it becomes public property. It is a lifelong work, and at threescore and ten is only begun. History may pass on the name, while poverty may be the reward!"—W. B. K. J., Allentown, Penn.

"No other man has given to horticulture so many valuable things as has Luther Burbank. The list of fruits he has given to this country is a large one and embraces some of the most valuable varieties now grown."—*Pacific Rural Press.*

EDUCATION AND SELECTION are the two great forces used in the production of all these new fruits and flowers.

Not knowing the facts, and because some of them happen to be crossed, people often jump at the conclusion that they are all summarily produced by crossing with about as little science or ceremony as a wizard would appear to do it with his magic wand.

VISITORS to our grounds are not allowed, as no possible benefit can accrue and we have no time to spare.

Applications for SAMPLE FRUITS cannot generally be complied with, as a small army of specially trained men would be required during the priceless hours of the ripening season, when the habits, peculiarities and probable comparative value of the many, many thousands of new candidates must be promptly, carefully, and very rapidly attended to.

ORDER EARLY AS POSSIBLE. Spring commences in California with February, and everything herein described must be carefully kept back by cold storage to supply Eastern and Foreign customers.

We hold all the stock of these novelties in existence; none of them can be obtained elsewhere on earth.

Everything described in this list will be *prepaid by mail or express* anywhere in the United States, Canada or Mexico, except the trees mentioned on pages 2 and 7.

NO RESTRICTIONS whatever; multiply and distribute as *fast as possible.*

TERMS INVARIABLY CASH; no time to keep books.

The marvelous favor which our work is receiving can, in a measure, be estimated by the expressions of scientific and horticultural societies and journals of all countries, by the managers of colleges, and experiment stations at home and abroad, and last by the people who love fruits and flowers.

A few sample clippings from the above-mentioned sources are introduced for variety. We have some ten thousand similar ones.

"California may well be proud of the rare work done by Luther Burbank as the producer of many useful and beautiful plants and fruit products."—*California Fruit Grower.*

"Luther Burbank has probably developed more new varieties of plant life than any other living man."—*Analy Standard.*

"I never lose touch of your great work. The fame of it rolls round the world, via London, to me frequently."—F. C. S., Yalumba, South Australia.

"It is easy to conceive, in regard to progress, that the Americans do not keep behind, and in California lives a horticultural searcher whose success excites the greatest admiration in the whole horticultural and botanical world."—S. S., in Magazine of the Royal Hungarian National Science Society.

"With what success Burbank has worked and pondered all the world knows."—C. H. S., in New York *World.*

"I respect your work above all that has ever been done for horticulture."—W. B. A., Blacksburg, Va.

New Plum—"APPLE."

Among the welcome surprises found three years ago among a lot of some twenty-five thousand Plum seedlings was this one, bearing a cruel load of enormous Plums when only two years old, while nearly all the others refused to bear so early, and none of them have produced a fruit in all respects equal to this one.

It was at once named *Apple* from the very close resemblance in form, color, general appearance and rare keeping qualities.

The tree is a fine, strong grower, with peculiar light brown bark. Its ease of propagation is one of its most surprising characteristics, again resembling the apple. Even common root grafts *all grow*, and buds and grafts have all grown under all circumstances as readily as apples. The foreman on the propagating farm, forcibly impressed with this freedom of growth, observed that the buds and grafts "would probably grow if fired among the trees from a shotgun."

Wood is yet too scarce to test for growing from cuttings, but from all present appearances it should grow as readily as quinces or currants.

The fruit, which averages about two and one-half inches in diameter, is striped and mottled like Imperial Gage until nearly ripe, when it turns to a deep reddish purple.

The superlatively rich, high flavored, sweet or subacid flesh is rather firm, pale red, with marblings and streaks of pink; nearly freestone. Its parentage is not known, except that it is a second generation seedling from some cross-bred seedlings, and no doubt Satsuma and probably Robinson are in its line of ancestry, though it is so greatly superior in all respects that any comparison with either would be out of place.

Ripens here soon after "Burbank," and sometimes keeps a month or more in good condition.

Grafting wood, per foot, $2; five feet, $6; twenty feet, $15. Trees one and one-half to two feet (root grafts on Japan Plum), each $3.50; per ten, $30. Trees three to four feet, budded on peach, each $6; per ten, $50. A single foot of wood will make four to six good grafts. These, if placed in vigorous old trees, will, the first summer, make buds enough to stock a nursery.

Grafting wood will keep a month or more in the package in which we send it, if placed in a cool place.

"'*Apple*' is a wonderful keeper."—J. R.

"The most luscious and delightful plum we ever tasted. Nothing could be better."—S. F. L.

"Its great size, vigorous growth of tree and perfect imitation of an Apple, as well as beauty of color, will make it most valuable."—R. G.

"Think it could be shipped to London with perfect safety."—L. C.

"The two-year-old 'Wickson' graft bore eighteen fine fruits, one of which measured seven and one-half by seven and one-fourth inches. The flavor is all that could be desired; color most handsome; tree a sturdy, handsome grower. It will have a great future."—D. H. & Son, Auckland, New Zealand.

"To my mind the 'Wickson' is the best of all Plums."—B. & G., Kyber Pass, New Zealand.

"In the Salt River Valley the 'Wickson' is now fruiting. It is counted as the King of Plums."—Redlands *Facts*.

"All who have seen the marvelous work which Mr. Burbank is doing have left inspired with the thought that comparatively little has been known of the possibilities of horticulture."—W. M. G., in Santa Rosa *Republican*.

New Plum—"AMERICA."

This giant plum originated from seed of the well known "Robinson" from a cross with the Japanese plum "Botan," and is from the same combination which produced "Gold" and "Juicy," both of which have, as would be expected, proved generally hardy throughout the United States, and no doubt *America* will prove quite as hardy.

In growth and general appearance the tree is like the American plums, having rather drooping, slender branches and less robust growth than the Japanese species, and yet is a good grower and exceedingly prolific.

The fruit of *America* is larger than the average Japan plums and from *four to sixteen times as large* as the popular American varieties, such as Robinson, Sophie, Maryland, Emerson, Miner, Milton, Wildgoose, Wayland, Prairie Flower, Ironclad, Hawkeye, Hammer, Chas. Downing, Mariana, Ohio Prolific, Lone Star, Wooten, Potawotamie, Honey Drop, Subcordata, Bassetts' American, Maritima and others, all of which are fruiting on our place.

The glossy, coral red fruit is not surpassed in beauty by any plum.

The light yellow flesh is moderately firm and very delicious, so good that those who do not like most plums call for "more" and keep right on eating *Americas.*

It ripens here July 20th, fully five weeks before "Gold," and two or three weeks before Robinson or Burbank, and like "Gold" it is a splendid keeper.

Will probably prove hardy throughout the United States, a part of British America, all of Europe excepting the northern part of Norway and Sweden and the north, central and eastern parts of Russia, and in every portion of the southern hemisphere where fruits are cultivated. "Gold" and *America* are so much like Americanas in everything but *fruit* that their hybrid origin may well be questioned until numerous seedlings are raised from them. By this means the matter can be settled accurately enough for all practical purposes.

If they are pure bred Americanas the more is the wonder, for their size and qualities are not duplicated elsewhere among the native plums.

Grafting wood only, per foot, $2; five feet, $6; twenty feet, $15.

"*America* is to my mind one of the finest Plums I ever tasted, while it has a color so attractive as to make it nearly irresistible."—S. D. W., Geneva, New York.

"All your world-famous novelties are behaving well here and are giving the greatest satisfaction. They are a great benefit to mankind."—D. H., Auckland, New Zealand.

"Mr. Burbank has no doubt produced more valuable new fruits than any other man now living."—S. W., Atlantic, Iowa.

"Burbank is the standard horticultural authority throughout Australasia. His name is everywhere spoken with reverence."—F. C., Sydney, New South Wales.

"The achievements of Luther Burbank are perhaps creditable as any originator in the world can claim."—E. J. W., Berkeley, California.

"The Wickson is the finest Plum I ever saw."—S. W., Atlantic, Iowa.

"The Wickson Plum is a beauty and a wonder. We consider it the first rival of the Burbank."—A. M. R., Austin, Texas.

"Your wonderful new creations have been a great boon to all fruit growers. The Wickson Plum fruited here last season and proved to be all that has ever been said in its favor. To my mind it is the best of all the Japan Plums."—B. & G., Kyber Pass, New Zealand.

New Plum—"CHALCO." 8

"After twelve years of experiment in crossing the unique, handsome, fragrant Chinese plum—Prunus Simoni, often called the "Apricot Plum"—with the Japanese and American plums, we now offer the first fruit of this long and very expensive work; expensive because Prunus Simoni not only bears no viable seeds here, but the pollen, too, is almost wholly absent. From these two circumstances it has been supposed, probably without foundation, that the Apricot Plum may itself be of natural hybrid origin.

The hardiness of the tree, unique form, rare fragrance and unusual color of the fruit make it a very interesting subject for experiment, and we often hear of those who are trying to combine it with other species by crossing, and that some of the new ones offered are from this combination.

No such combination has ever been offered until *Chalco* now makes its appearance, which is a Simoni-Burbank cross, and anyone can see at a glance that the two species are very well combined.

The fruit, which ripens just before the Burbank, is large, flat like a tomato, deep reddish purple, with very sweet, rather firm, exceedingly fragrant, yellow flesh and a small seed. Like the Apricot Plum the fruit is almost as stemless as a peach, and completely surrounds the older branches as thick as it can stick, like kernels on a huge ear of corn.

A superior shipping plum, as it ripens well when picked green, and keeps nearly, or quite, a month.

A tremendous grower and unsurpassed in productiveness.

It must wholly supplant Prunus Simoni, and will prove profitable in most places where that species is practically a failure.

Chalco is the forerunner of a new hardy race of plums, more of which are on the way.

Grafting wood only, per foot, $2; five feet, $6; twenty feet, $15.

"The Simoni Burbank (*Chalco*) is a rare combination. The samples indicate that it is better in quality than either parent."—S. Bros., Louisiana, Mo.

"Sample fruit (*Chalco*) received. Quality fine, rich and fragrant. It is all you claim for it. Such fruit must come to the front."—S. D. W., Geneva, New York.

"There can be nothing in the plum line which can surpass it (*Chalco*) for delicacy and luscious flavor."—C. H. P., Newark, New York.

"The plums (*Chalco*) were large; almost globular, being flattened at base and apex; dark cherry or cinnabar color; stem short; pit very small; flesh fine grained, apricot yellow, exceedingly juicy, very sweet and possessing a peculiar aromatic flavor which was most agreeable. This hybrid is a most delicious plum. It assuredly has an immense future before it."—*California Fruit Grower.*

"Much to my surprise the Wickson grafts received from you two years ago are ripening a crop of fruit."—T. T. L., South Haven, Mich.

"I am filled with wonder and amazement when I see what you are doing for the benefit of the race."—T. W. J., Youngstown, Ohio.

"This modern wizard has produced results to startle the scientific horticulturists of the world."

"These new creations will supply comfort and happiness to thousands."—T. V. M., Dennison, Texas.

"The Wickson is the finest plum I have ever seen."—C. C. G., Manhattan, Kansas.

"The price asked for your novelties is altogether too low."—B. M. Y., Morgan City, La.

"No words can fitly express my appreciation of your work."—Editor *Farm Journal*, Philadelphia, Pa.

"We would gladly pay $5 each for your catalogues, if that was the price."—A. B., Philadelphia, Pa.

"The interest in your work no doubt overwhelms you with an ocean of correspondence. Unfortunately there are those who cannot be brief."—G. O., Nursery P. O., Texas.

A seedling of the well-known French Prune, which it surpasses considerably in size of fruit, which is a handsome flattened, ovoid in form; white, semi-transparent, with a heavy white bloom.

In honeyed sweetness, combined with a peculiarly attractive fragrance and flavor, it surely excels all other Prunes or Plums.

The fruit when cured produces one of the most exquisitely delicious Prunes in existence, but requires care in handling and will not cure well in the open air. Specially recommended for market and home use.

Our interest in this Prune for Australia and New Zealand has been purchased. I do not, therefore, accept orders for it from these countries.

Grafting wood only, price one foot, $1; ten feet, $8; one hundred feet, $50.

The four Plums offered this season belong to four very distinct classes, each the best and most distinct of its class.

"The *Pearl* is an exquisite Prune; seems as though it might have some Jefferson blood, but is of even finer quality."—S. Bros., Louisiana, Mo.

"We have sold thousands of your Plums in the Old Bay State; they seem perfectly hardy and are giving general satisfaction."—A. H. C. & Co., Worcester, Mass.

"Wickson is certainly an improvement over the Burbank, and the best Plum of the Japanese strain that I have seen."—H. E. V. D., Parksley, Virginia.

"The Giant Prune is truly a giant and of excellent quality. The marvels you are sending out are more marvelous than the gold mines of a former generation."—C. L. W., Des Moines, Iowa.

"The fine Japan Plums produced by you have proved a boon to this section, where none of the improved native or European varieties seem to thrive."—B. M. Y., Morgan City, La.

"The Giant Prune has fruited and is fully up to my expectations."—S. D. W., Geneva, New York.

"The Wickson is a daisy. No finer fruit has ever been grown on this coast."—*Rural Californian*, Los Angeles, Cal.

"The Giant Prune is a marvel of beauty and excellence."—S. W., Atlantic, Iowa.

"I think these Plums (Wickson) are the finest product of scientific horticultural evolution which the world has ever seen."—P. E., Roswell, New Mexico.

"Our most prominent fruit growers all say that the 'Giant' is the finest Prune they have ever seen."—C. J., Los Angeles, Cal.

"The Wickson Plum is simply delicious."—F. M. H., New York.

"The 'Burbank' after thorough trial has proved to be the best, most valuable, and most profitable fruit introduced to the Australasian Colonies. This now celebrated variety is not only rivaled but surpassed in 'Wickson.' The most critical experts came and were struck with astonishment with what they saw, and could find no fault with the tree or the fruit, and wondered what further developments were likely to be produced. The fruit is of the largest size and most gorgeous appearance. Specimens exhibited on Queen street from a single graft set two years measured seven and one-half by seven and three-fourths inches. The flavor is much superior to the 'Burbank.' "—D. H. & S., Auckland, New Zealand.

Hybrid Walnut—"PARADOX."

Juglans Californica × *Juglans Regia.*

One of the most interesting and valuable hybrids produced among Walnuts, surpassing all others in rapidity of growth, size of foliage and beauty of form. Budded trees six years of age under the same conditions are fully twice as large, broad and tall as Black Walnuts at ten, or Persian Walnuts at twenty years of age. Ten to twelve feet growth per year is not unusual; thus the hybrid grows twice as fast as the combined growth of both its parents. The leaves, which are often from two feet to a full yard in length, are clean cut, glossy, bright green, have a surpassing sweet odor resembling that of fragrant Apples and as powerful and peculiar as that of Roses or Lilies.

The bark is thin, smooth, light gray, with marblings of white; the wood is very compact, with lustrous silky grain, taking a beautiful polish, and as the annual layers of growth are often an inch or more in thickness, and the medullary rays prominent, the effect is unique. This hybrid originated in 1888 from a cross made the year before; like many true hybrids, though blossoming freely every season, it bears but a few nuts, but is easily budded or grafted on thrifty young Black Walnuts.

As an ornamental and timber tree it is peerless.

The six beautiful specimens of this hybrid growing on my home place have been objects of admiration to all who have seen them.

Young trees could have been sold at almost any price, but, having no time to raise them, offer this season's crop of nuts, which will be a great surprise in producing about one-third of a new type of the broad-leaved Persian Walnut, one-third of a new type of the California Black Walnut, and about one-third combined, as in the original tree.

New varieties of priceless value will certainly be produced from these hybrid nuts, which germinate very freely.

Paradox seedlings will probably be about as hardy as the common Persian Walnut.

Price per nut	$ .50
" " ten nuts	3.50
" " one hundred nuts	25.00

"So far as we know no man in the world is doing so much in the origination of new fruits and ornamental plants. The work is advancing each year in extent in elaborateness and in results of the highest value and uniqueness."—*California Fruit Grower.*

"Every day he does the work of two or three ordinary men, and every day he wrestles with the problems of life until he forces answers from the very lips of the Sphinx."—C. H. S., in San Francisco *Call.*

"Mr. Burbank has not only created numerous fine varieties capable of unthought of charms to the garden, but has also produced an almost limitless mass of promising materials for other hybridists and florists to work upon."—W. A. B., Philadelphia, Pa.

"The benefit accruing to the world from these new creations in fruits and flowers is incalculable."—*Texas Farm and Ranch.*

"I fully believe you are unlocking the portals of a limitless ocean of valuable knowledge in horticulture."—G. H. C., Phœnix, Arizona.

"I cannot refrain from complimenting you on your most remarkable results, of which I heard not only in Europe, during a stay of some years there, but also in a region as far away as Java, where the Dutch cultivators are very much interested indeed in some of your remarkable productions."—D. G. F., Washington, D. C.

"While I have long been impressed with your work, I am now overwhelmed with the vast amount of good you have been able to accomplish."—W. B. A., Virginia.

JUGLANS CALIFORNICA.
Staminate Parent.

JUGLANS NIGRA.
Pistillate Parent.

HYBRID WALNUT.
All Life Size.

Hybrid Walnut—"ROYAL."

Juglans Nigra × *Juglans Californica.*

Unlike the hybrid just mentioned, this one produces nuts in abundance and of the largest size, as may be seen from the life-size photo-engravings. The quality, also, is very much superior to that of either parent. The meat, which is very large, and parts more readily from the shell, has none of the disagreeable strong taste of the common American Black Walnut, and much more sweetness and character than the California Black Walnut.

In foliage, growth and general appearance the characteristics of both parents are about equally combined in the hybrid. Bearing nuts when young, and abundantly as it does, a promising new field is opened for producing still other variations.

The nuts germinate freely, and, though varying within certain limits, yet reproduce the rapid growing parent hybrid form with only an occasional reversion. Seedlings of the *Royal* will probably be hardy where the American Black Walnut thrives. Not a tree or a nut of this new hybrid has ever been sent out before.

Price per ten nuts	$ .75
" " hundred nuts	5.00
Trees one year old, each	1.00
" " " " per ten	6.00
" " " " per hundred	40.00

One thousand one-year-old trees, $250. Two-year-old trees, four to six feet, each, $2; per ten, $10.

"His insignificant little farms—trifling patches of ground—which would invite the scorn of the average horticulturist, are the central point of an eager observation proceeding from every enlightened corner of the earth."—San Francisco *Call.*

"The work is wonderful; it is marvelous. He has no specialty unless the entire vegetable world may be expressed as such. The scientific methods which he follows, and the results, are not excelled or even equaled. Many of our experiment stations expend large appropriations with results that are valueless in comparison."—W. W. T., Detroit, Mich.

"He stands easily at the head of the world's great experimentalists in plant life."—W. A. B., Philadelphia, Pa.

"No man of later years has done half as much to promote scientific agriculture. It would be impossible for even the imaginative mind to attempt to estimate or describe the changes which will be wrought in the world by horticulture in future years."—San Francisco *Call.*

"It will be better for Burbank and better for humanity if we give him more encouragement while he is with us and fewer monuments when he is gone."

"M. Luther Burbank, de Santa Rosa, a exposé en suite les moyens quil considère les meilleurs, surtant par l'hybridation de certaines variétiés, pour produire de nouveaux fruites et de nouvelles fleurs."—Journal de la Société Nationale d'Horticulture de France.

New Rose—"SANTA ROSA."

(Hybrid Bourbon Tea.)

The old favorite, ever-blooming rose Hermosa, introduced in 1840, is probably the best known and most widely grown of the entire Rose family. It very rarely produces seed, so that improved Hermosas have not made their appearance until *Santa Rosa*, now offered, which was grown from second generation Hermosa seed with an unusually fine semi-double, thick-petaled seedling of the well-known Bon Silene for the other parent.

(See also fourth page of cover.)

In *Santa Rosa* we have a rose wonderfully improved in size, brilliancy of color and perfection of form, with Hermosa's reckless habit of blooming at all seasons. Every little plant commences to bloom as soon as it starts from a cutting, and the branches, roots, and even single buds take root and grow almost as freely as grass.

Flowers rich shell pink, inclining to crimson, full, double reflexed petals. Plants grow in rather compact, bushy form.

Foliage always free from rust, mildew, or any defect. Not a transient novelty, but a rose for everybody everywhere.

Strong field-grown bushes.

Each, $1; per ten, $5; per hundred, $40.

To South American, Australasian, East Indian and African purchasers we will send value of remittances in partially dormant cuttings at the proper season, as it is very difficult to ship growing Roses through the tropics safely. We ship dormant grafts, cuttings, nuts, seeds, bulbs, etc., safely everywhere in metallic packages by mail.

"A wonderful illustration of this fascinating art."

"Fragile products of his magician skill."

"I am anxious to let you know that your way of sending scions is simply perfect. They come to me as fresh as if cut but a day."—H. W., Sackville, Australia.

"Mr. Burbank has become famous the world over for his successes in creating new fruits and flowers."—*New England Florist.*

"His results are famous in every center of botanical science, not only for their intrinsic value, but for their unusual suggestiveness."—San Francisco *Examiner.*

"In fact, a thing called a catalogue, which heretofore has been almost a synonym for a monstrous lie, has become a thing of poetry and of prophecy."—E. S., Kennett Square, Penn.

"Burbank is to-day recognized by the most eminent authority as the greatest scientific horticulturist of this or any other age."

"Nor is this all or a thousandth part of all that is revealed in this place of beauties and of wonders, for more startling than his floral triumphs are his successes in the creation of shrubs and trees bearing fruit for the delectation and sustenance of man."—W. M. G., in Santa Rosa *Republican.*

New Calla—"FRAGRANCE." John Lewis Child

The common garden Calla, though always destitute of any odor unless it be a faint one of muriatic acid or a toadstool, has still won its way into universal public favor.

In the new Calla *Fragrance*, which is one of many thousand seedlings of "Little Gem," we have not only a most charming flower *produced in a profusion never before surpassed, if equaled, and a week or two earlier*, but also with a genuine, sweet, *lasting fragrance* all its own but similar to the fragrance of violets or lilies.

The plants are of medium size, compact in growth and multiply with great rapidity, growing and blooming profusely under any ordinary treatment. In purchasing *Fragrance* no mistake need ever be made, as the foliage is unique, being handsomely fluted, as shown in the halftone. Correspondents have been writing ever since it was first mentioned in 1894 asking when it would be introduced. It is now offered for the first time.

Bulbs, largest size, ready to bloom, each, $1; per ten, $6. Bulbs, medium size, each, 50c; per ten, $3. Bulblets, about the size of hazel nuts, per ten, $1; per hundred, $6.

Szívesen elismerjük Burbanknak az általánosan kedvelt *Gladiolus*-szal elért eredményét is, mivel a California része csupasz volt; a másik hiba az volt, hogy mire a szár legfelsö virágai kinyiltak, a legelébb kinyilt alsó virágok már elhervadtak. A California e tekintetben szerencsés javítás, mert a virágok szárának nem egyik oldalán, hanem tömör sorokban köröskörül sorakoznak, épen úgy, mint a jáczint virágszára körül a virágharangok; a legelébb kinyilt alsó virágok pedig megtartják teljes üdeségöket a legfelsö, tehát a legkésöbben feslö virág kinyiltáig. E jó oldalakat még ama nagyjelentöségü körülmény tetézi be, hogy e Gladiolus-fajtának, mely különben törpe is, néhány színváltozata *teljes* virágu.—*Royal Journal of Natural Science*, Budapest, Hungary.

"Thee is certainly doing a great work."—I. C. R., Moorestown, New Jersey.

"Never before have I found anything so interesting as your 'New Creations.'"—B. M. Y., Morgan City, La.

"A Wonder Garden."—N. E., in *American Agriculturist.*

"The most remarkable farm in the world."—New York *World.*

"The most wonderful garden in the world."—*American Agriculturist.*

"The world's most wonderful flower garden."—San Francisco *Chronicle.*

"This veritable Garden of Eden."—New York *Journal.*

"Impossible? Nothing is impossible in this Garden of Eden."—Santa Rosa *Republican.*

"The birthplace of new vegetable forms."

"We wish to have a permanent bound record of the origin of these wonderful new fruits and flowers, the creation of which is building up a monument to you which will remain for generations."—Whangarei Fruit Growers' Association, New Zealand.

"By the way, if he should never attempt another creation, but simply perfect those now on hand, he could work thereon for fifty years and give to the world all it could digest in half a century."—W. A. B., Philadelphia, Pa.

"A wonderful work with plants."—J. N., Winnitza Podolio, Russia.

"We gladly reprint an editorial which appeared in the Vacaville *Reporter* November 20, 1897, as it expresses more forcibly than anything we have seen, the estimate in which Luther Burbank is entitled to be held by his fellowmen:

"'If we were asked who, of all the citizens of California, is the most prominent in the eyes of the world, and who has done most to deserve the thanks of his fellow-citizens, we should make haste to speak the name of Luther Burbank. Moreover, when the average man stops to think of what he has done, he cannot but be surprised that so great a benefactor of the human race should not be more honored. We do not remember that he has ever figured among any list of "prominent citizens," nor do we recall any effort to interview him and find out his opinion on any one of the thousand questions the newspapers permit the "prominent citizen" to talk to the people about. If a man secures a fortune, honorably or not, he is at once in the public eye, and continues there until he dies. He is generally mentioned for political honors, and, if he be very rich, is pretty certain to have a chance to see his name figure as a candidate for the United States Senate. Luther Burbank has done more than all of the rich men of California, added to the infinitesimal quantity representing the accomplishment of the workers in the political vineyards. He is unknown to many of the people of the State, nevertheless, and possessing qualities which rank him with Stevenson, Howe and Edison, and which have given him fame in all parts of the world, we will wager that in the county of Sonoma a pretty good percentage of people can be found who do not know of any particular reason why he should be possessed of any reputation. If Burbank was living on the Continent the highest honors would be his. Living in America, he has been appointed Vice-President of the American Pomological Society, and some sort of a committeeman on new fruits.'"—*Analy Standard.*

THE TREND OF HORTICULTURE.

"Untamed Nature thinks only of the perpetuation of its species. The wild plants of field and forest, luxuriating in the warming rays of the summer sun, extract from the soil the nourishment and vitality essential to the completion of their little round of life; and then having passed through their short cycle of existence, from the bursting bud to the ripened fruit, they droop and die. The mysterious operation of growth and death is repeated season by season, and one generation is but a reduplication of all the others, modified slightly by peculiar conditions of soil and climate. The pattern of nature is spread out with glorious possibilities, but the individual efforts of the plants to raise themselves above their kind are abortive. Their hopes are blasted in the bud, flower, or fruit; the limitations imposed upon them prove insurmountable barriers.

"Improvement and progressive development begin with man. The struggling plant that has outstripped its kind and stands on the verge of decay, knowing that it will be replaced the following season by another whose feeble growth may neutralize all the good that it has accomplished, suddenly finds itself lifted to more congenial surroundings. The mere struggle for a precarious existence instantly ceases to absorb all its strength and powers. The arbitrary laws of Nature can no longer limit development and expansion, and the plant has leisure and opportunity to cultivate the beauties and refinements of a new life.

"The flowers take on a fairer and more delicate hue, improving in size and beauty by slow magical processes; the foliage intensifies in strength and color to form a fitting background for the blossoms, and the maturing fruits develop a sweetness and lusciousness heretofore existent only in a potential state. The plants slowly differentiate from their kind, assuming the appearances and characteristics of a new order, retaining, however, enough of the blood of their ancestors to drag them down to the level of their old primal stock if once freed from man's control and left to their mutual selection."—*Lippincott's.*

No one unacquainted with this unique work can form any conception of the labor and [illegible] which his discoveries have involved.

"What Shakespeare was to poetry and the drama Luther Burbank is to the vegetable world."

"This immense work is conducted so quietly that no one except the great experts of the plant world will understand just what is being done."

"There is nothing which could be so interesting to one horticulturally inclined, as this brief account of your wonderful work in training the forces of Nature toward the greater benefit of man."—J. Horace McFarland, Penn.

—THE—

1899

SUPPLEMENT TO

NEW CREATIONS

IN

FRUITS AND FLOWERS

"SULTAN."
TWENTIETH CENTURY FRUIT

"POTAWOTAMIE."
NINETEENTH CENTURY FRUIT.

"I wish I could express in words, the great work you have done and are doing for humanity. Men may come and men may go, but your good work will go on forever, and forever, and forever.

"May the years be many for you to enjoy the high honors and deserved emoluments of your study. You have won your way to the top of the ladder of fame; rest and view the world as no man before has ever had the opportunity to do."—Edward W. Davis, University of California, Berkeley.

"His knowledge of plant variation is so excellent, and his actual experience so wide, that the production of a novelty, instead of a chance in thousands, obtained by haphazard methods, is a matter of definite aim, approached with a wide knowledge of the constituent elements and with a very encouraging probability of success."—Carl Purdy in *London Garden.*

"Whenever humanity calls, Mr. Burbank stands ready to respond, and it may be said for his work that his best introductions are yet to come. It requires much time and close attention to properly segregate, classify, test and propagate, and after having secured the desired improvement the work increases in value and results in geometrical ratio as time progresses, one life affording only a good beginning for others to build upon."—*American Florist.*

BURBANK'S EXPERIMENT FARMS,

LUTHER BURBANK,

Santa Rosa, Sonoma County, California, U. S. A.

Office and Residence, 204 Santa Rosa Avenue.

PROTECTION FOR FRUIT EVOLVERS.

From the "CALIFORNIA FRUIT GROWER."

"Civilized nations under certain conditions protect by letters-patent a person's invention, or by copyright, his thoughts, in the effort to secure to him or her a fair remuneration for what after a term of years becomes the free gift to the world of a new, and supposedly, valuable thing. Why should the originators of new fruit varieties be denied similar protection? Manifestly, there is no logical reason why the writer of a book, the composer of a song, the designer of a drawing or the originator of a mechanical device should be protected in their productions, while the originator of an improved flower or fruit is denied the same privilege.

"To appreciate the great good that the fruit evolver has been to the world it is only necessary to remember that all the varieties of luscious plums with which mankind is to-day familiar, came without exception from one parent stock, the fruit of which was little, hard, flavorless, acrid and indigestible—if by any chance a specimen was introduced into the stomach. So with the peach, its parent was not only a valueless thing, considered as a food, but it was in a degree actually poisonous. Fruit variety originators and horticulturists, however, experimented with it through centuries, and the diminutive, ill-shaped, noxious thing has become at the touch of successive wizards, two valuable fruits—one, the magnificently formed, tinted and flavored peach as it is known in California, another, the meaty, delicate almond.

"But the work is by no means at an end. Improved varieties are continually brought out. The effort keeps pace with man's development, and to the end of time the fruit variety originator or the fruit evolver will find plenty to do—if he is sufficiently encouraged.

"Only a few people comprehend the marvelous patience, the rare skill, the close attention, the hard work and the cash outlay necessary to be a successful fruit variety originator.

"Every improved form of fruit and every improved flower becomes in a short time the property of all alike. That is to say, the entire world is the gainer. Whether the first plant sells for one dollar or one million dollars the result in a few years is the same; the new variety is a gift to mankind."

"The protection of originators would be protection of planters against frauds."—Jacob Moore, Athenea, N. Y.

"The families of Burbank, Munson and Moore have as good a right to be millionaires as have those of Hostetter and Edison, and they would perhaps know as well how and be as willing, to do good with their means. I have a feeling of justice for those who have spent largely of time, thought and money for others, when they should have, but do not, get anything of consequence in return."—H. E. VanDeman in *Green's Fruit Grower.*

"Precisely the same power has the originator over his new fruit, it is in his power to destroy or disseminate it. If he consents to the latter course he should be given such exclusive rights therein as will enable him to obtain compensation."—Jacob Moore.

"One reason why Mr. Burbank is not better known to the general public is the fact that his name is associated with very few of his horticultural 'creations.' When he develops a valuable fruit or flower he sells it outright to some nurseryman, who gives it what name he pleases—very likely his own. We recall but two 'creations' which bear his name. We all know the 'Burbank potato;' most of us eat them every day. Luther Burbank invented it. Most of us know the 'Burbank plum,' which is also his. Beyond that we only know that the choicest flowers and fruits that delight our senses were developed by his painstaking care."—San Francisco *Chronicle.*

"The work of plant breeding seems to be the most important, as well as the most promising of results that it is possible for any man to enter upon at this time and I am greatly pleased to see that you have pursued the work to the extent of earning the right to announce your results as 'new creations."—Editor of *Kansas Farmer.*

EDUCATION AND SELECTION are the two great forces used in the production of all these new fruits and flowers.

Not knowing the facts, and because some of them happen to be crossed, people often jump at the conclusion that they are all summarily produced by crossing, with about as little science or ceremony as a wizard would appear to do it with his magic wand.

VISITORS to our grounds are not allowed, as no possible benefit can accrue and we have no time to spare.

Applications for SAMPLE FRUITS cannot generally be complied with, as a small army of specially trained men would be required during the priceless hours of the ripening season, when the habits, peculiarities and probable comparative value of the many, many thousands of new fruits must be promptly, carefully, and very rapidly attended to.

ORDER EARLY AS POSSIBLE. Spring commences in California with February, and everything herein described must be carefully kept back by cold storage to supply Eastern and Foreign customers; we have arrangements, however, for keeping GRAFTING WOOD in the most perfect condition all through the season.

We hold all the stock of these novelties in existence; none of them can be obtained elsewhere on earth.

Everything described in this list will be *prepaid by mail or express* anywhere in the United States, Canada or Mexico, except the larger trees mentioned on pages 7, 13 and 16.

NO RESTRICTIONS whatever; multiply and distribute as *fast as possible.*

TERMS INVARIABLY CASH; no time to keep books.

ALL THE CUTS USED IN THIS CATALOGUE ARE EXACT NATURAL SIZE, UNLESS OTHERWISE NOTED.

TO CORRESPONDENTS.

Kindly be as brief as possible. Ask no questions which you think can be answered elsewhere. With all the modern conveniences of graphophones, typewriters, &c., it is at times impossible to keep up.

Always write your questions on a postal card with spaces for reply, and whenever possible arrange the question so that it can be answered by yes or no. If a reply is desired which requires more space than a postal card affords, always enclose five dollars.

"I appreciate the very great preciousness of your time."—H. E. VanDeman.

"Mr. Burbank is compelled to deny admittance to the large number of people who desire to see his wonderful gardens, else he would have but little time for experimenting."
—*Post Magazine.*

"Mr. Burbank's life is an ideal one; no man could wish for more. His reputation is founded on a rock, and it will increase with the years in the continuance of a work which means so much to the science to which he has devoted the energies of an unselfish life."
—Carmen Harcourt in *Post Magazine.*

"I value your Catalogue more than gold."—Dr. A. B. Dennis, Cedar Rapids, Iowa.

"May God spare you to long continue in this great work in blessing the race."—J. F. Martin, Winfield, Kans.

"We recognize the great work you are doing."—Burton Bros., Vacaville, Cal.

A New Early Plum—THE "CLIMAX."

Thousands of fruit growers, who know that our "WICKSON" plum has been selling for $5.50 to $8.55 per 20-lb. box wholesale at auction in New York the past summer, are planting it on an extensive scale, knowing, full well, that it is of no use to grow any other plum during its season. The "WICKSON" has been very appropriately named the "King of Plums," and we now have the extreme pleasure of introducing a new King—the "CLIMAX"—which is the best selection from a great number of hybrids of Simoni X Botan.

CLIMAX.

Fruit heart shaped, as large as Wickson and more highly colored, so fragrant that a whole house is perfumed with a single fruit; delicious as could be desired or imagined, and, above all, it ripens here July 12th, before any other good plum, and nearly a month before Wickson.

Tree extremely vigorous, rather upright growth with strong branches, prominent buds and very large leaves,—the very picture of hearty vigor.

Productive as the Burbank, about four or five times as large, two or three weeks earlier and very much more richly colored.

The most wonderful plum ever grown, and one which will change the whole business of early fruit shipping.

Prominent California growers who learned of this "KING" were disposed to form a TEN THOUSAND DOLLAR SYNDICATE for its purchase and control, but instead it is now offered freely to all who may wish to purchase.

Secretary Lelong, of the California State Board of Horticulture, reports as follows:

"CLIMAX.—Cross of Simoni and Botan. Very large, measuring 6¾ by 7½ inches in circumference, heart shaped, a superbly rich plum, extremely early, ripens in the coast counties early in July, before any other good plum.

"Color of flesh yellow, sweet and delicious with a pineapple fragrance.

"Skin thick, firm, deep vermillion red, with very minute white specks; stem short, strong; pit medium to large, separates easily from flesh.

"Tree a vigorous grower, very productive.

"Branches and leaves resemble the Heart cherries in size and vigor.

"This is destined to become the best shipping plum that has come to my notice. Originated by Luther Burbank of Santa Rosa.

"A limited quantity of grafting wood will probably be offered next spring."

Prof. F. A. Waugh, of the Vermont Agricultural Experiment Station, describes "CLIMAX" as follows:

"Form, strongly heart shaped; Size, very large; Stem, short, strong; Apex, rounded; Color, deep, dark red; Skin, thick, firm; Flesh, yellow, firm; Stone, large, but little flattened, free; Flavor, sweet, rich, fruity; Quality, extra fine."

"'CLIMAX' is the result of a cross made by using pollen of Simoni upon one of the Botans. It is about the largest plum I have ever seen, except Kelsey. The shape is oval and quite regular. In color, it is a deep, reddish purple, very rich-looking and

attractive. The flesh is yellow, and firm until fully ripe, when it becomes melting and juicy. It is almost a freestone. The flavor is a pleasant subacid, with a peculiar aroma that is deliciously refreshing. The quality is much better than that of any early plum I know, and is good compared with any kind. It ripens before Willard or Red June. If this variety prove as valuable elsewhere as at Santa Rosa, it ought to be the early plum above all others."—H. E. VanDeman in *Rural New Yorker.*

"We have had the pleasure of examining one of Mr. Burbank's latest triumphs ('CLIMAX') in the plum line, which he now designates as A in a circle. If we are not mistaken it will rank as one of his most unique and valuable productions. It is a cross of Simoni and Botan by the scientific method of crossing individual blooms.

"It is very symmetrical, oblong, with the stem end beautifully rounded and the apex slightly extended, a rich bright red, exceedingly fine skin and tender flesh of bright yellow.

"In flavor it carries the wonderful range of suggestions of the Simoni with the banana after taste very strongly developed. It is a fountain of juice and its flesh is rich and melting.

"All these striking characters are given added importance by the exceeding earliness of the fruit, which seems to ripen about a week ahead of Willard and Red June.

"The tree seems to be a very strong grower and free bearer.

"If we are not mistaken this is going to be a record-breaking shipping plum for early regions."—*Pacific Rural Press.*

"A monster indeed of which its creator presented optical proof, it is richly colored and has a flavor somewhat similar to the banana but infinitely more delicate. It ripens several weeks before any other good plum; this fact alone will cause it to revolutionize the growing of early fruits for the eastern market. The writer concurs in the eulogy delivered upon it by the director of a New England college of agriculture—'It is as much superior to the best variety of cultivated plums in flavor, as the peach is superior in flavor to a potato.'"—W. G. in Santa Rosa *Republican.*

"The finest plum I have ever seen and of better quality than the best, it is surely the best and grandest of all, and will make a revolution in plum culture, its extreme earliness means gold mines to the fruit growers."—H. Knudson, Brown Co., Minn.

"Your wonderful plum (CLIMAX) came to hand, it was in the finest condition and what a Glory! what a Fragrance! what a Flavor. It's grand, and must be the coming Plum of the World. I have been advertising the WICKSON as the KING of FRUITS and scores of people come here to see the trees loaded down with grand fruit, and all say, 'what a wonderful fruit' and so it is. A prominent English horticulturist came here last week to see them and pronounced them the grandest sight he ever saw.

"The 'CLIMAX' being earlier just fills a place and makes, including the BURBANK the grandest Trio of Plums the world ever saw."—G. H. Clayson, Arizona.

"I am delighted with the new, early plum (CLIMAX). I believe it is all you hope it is. I was so impressed by its peculiar, delicious flavor; the firmness of the flesh; its keeping qualities and the unusual earliness, great size and beauty of the plum, that I saved the others to have our largest shipper here test it with me, and he was also greatly impressed with it."—S. F. Leib, Santa Clara Co., Cal.

"The fragrance (of CLIMAX) is something remarkable, this one specimen scented the whole house."—A. A. Halladay, Bellows Falls, Vt.

"The plum is a magnificent one, rich in color and quality."—Santa Rosa *Republican.*

"Its (CLIMAX) fine color, size and delicious flavor will surely bring it to front as an early shipping plum."—Geo. C. Roeding, Fresno, Cal.

"All other horticulturists may as well quit their work as none of them have ever produced anything in the line of fruits that will bear comparison to this one single product of yours, the 'CLIMAX,' although they have been working at it for thousands of years."—H. Knudson, originator of the "Compass" Cherry, Brown Co., Minn.

"Is it possible there can be any thing better than WICKSON? I have named it 'The King of Fruits for this Salt River Valley.' What next I pray you? Is there no limit to the possibilities of producing new and grand fruits?"—G. H. Clayson, Arizona.

"'CLIMAX' must have a great future before it."—H. E. VanDeman, Pomologist, Virginia.

"Parties who have seen it (CLIMAX) say it is as nearly perfect as one could wish."—S. W. Hoyt, Vacaville, Cal.

"I divided your new plums (CLIMAX) with some of the leading fruit men of the State and they are enthusiastic concerning them. It will be a winner."—S. F. Leib, Santa Clara Co., Cal.

"Giants in size, very best in quality, truly wonders of the nineteenth century."—H. Knudson, Minn.

"It is grand and must be the coming plum of the world."—Geo. H. Clayson, Prest. Arizona Nursery Co.

"Samples of 'CLIMAX' received in fine condition. It is the wonder of wonders. Such size, and earliness, and perfection of form, and carrying the strange flavors of Simoni—a whole fruit basket of suggestive flavors. I believe it will prove a record-breaker for you."—E. J. Wickson, Berkeley, Cal. Agricultural Experiment Station.

"'CLIMAX' is likely to cut an important figure in American Pomology hereafter."—F. A. Waugh, Vermont Agricultural Experiment Station.

During the ripening season of "CLIMAX" we were so very busy that it was only possible to send it to half a dozen parties for testing.

The opinions given above, of those who did receive it, should be sufficient.

GRAFTING WOOD.

GRAFTING WOOD PER FOOT, $10. TWO FEET, $15. FIVE FEET, $30. TEN FEET, $50. FIFTY FEET, $200. ONE HUNDRED FEET, $350.

DORMANT BUDS ON PEACH OR ALMOND ROOTS, EACH $10. THREE FOR $25. JUNE BUDS, ONE TO TWO FEET, ON PEACH ROOTS, EACH $20. THREE FOR $50.

THE PRICE for grafting wood of these new fruits may seem high to those who are ignorant of the vast TIME, CARE and EXPENSE required to produce them. Most people acknowledge the difference in value of gold and lead; it is often more difficult to appreciate the difference in value of two little pieces of living wood, one of which has the power of producing fruit (like WICKSON during the past season) worth $855 per ton at auction, wholesale, while the other can only produce fruit worth $5 per ton at even a greater cost of production.

The ORIGINATOR of these new fruits practically gives them to the world, receiving, however, some thanks and a very few dollars.

The GROWERS get, in the aggregate, millions, and the production and sale of fruit is greatly extended.

Many growers who three years ago purchased WICKSON WOOD of us at $2 per foot, got their $2 back in fruit last summer with SIX HUNDRED PER CENT COMPOUND INTEREST PER ANNUM ON THE INVESTMENT ADDED, and the end is not yet.

"There seems to be no limit to your powers of improving our fruits and flowers."—B. M. Young, Morgan City, La.

"All the Chestnuts Mr. Coe purchased of you are fruiting splendidly this year on two-year-old trees; I am greatly pleased with them."—J. H. Hale.

"I consider you the Pioneer boss originator of new fruits of great value for the South Atlantic Coast."—R. Bates, Jackson, S. C.

"My 'BURBANKS' are a wonder. The trees are loaded with very fine large fruit averaging about 6 inches in circumference, and with this load of fruit the trees are making a growth of from 3 to 7 feet."—A. A. Halladay, Bellows Falls, Vt.

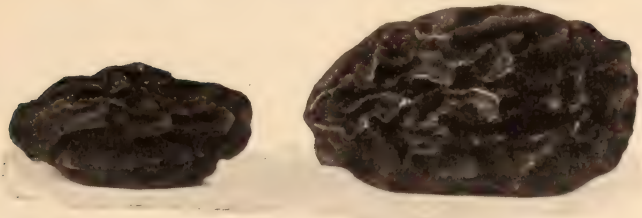
"People hold up their hands in astonishment, delighted, never saw anything even to begin to compare. I verily believe 'GOLD' the grandest and handsomest fruit ever seen by mortal man."—W. M. Hastings, Colo.

"The 'WICKSON' plum bears the largest fruit which has yet been introduced that is hardy in New York."—*Orange Judd, Farmer.*

"That the 'ABUNDANCE' proves to be all that is claimed for it seems now a settled fact."—*Rural New Yorker.*

"21 deg. below zero. 'GOLD' alive to the very tips."—E. C. Beaman, Ontario, Canada.

A New Prune—"SUGAR."



"FRENCH" PRUNE. "SUGAR" PRUNE.

It is with intense satisfaction that we can at last introduce a new prune which bids fair to add millions to the wealth of the State and Nation, and which will be hailed with delight by growers, dealers and consumers throughout the world.

For many years we have labored to produce a large, early, productive, handsome, easily cured, richly flavored prune, with a high percentage of sugar; the prize appeared four years ago, and we have now tested it in every way sufficient to warrant its introduction and we are upheld in our estimate of its great value by all fruit growers who have seen it, and at this writing, even before grafting wood has been offered, numerous growers have ordered from $50 to $500 worth for grafting regardless of the quantity to be received.

The tree is very far superior to the French prune tree in every respect, better grower, better bearer, better foliage, better form, requires less careful pruning, will carry and mature a larger crop of fruit. The fruit is unusually even in size and very large, averaging thirteen to fifteen to the pound fresh; at least three to four times as large as the French prune grows here.

Following is an accurate description taken from the report of B. M. Lelong, secretary of the California State Board of Horticulture:

SUGAR PRUNE.—An extremely early prune, ripens August first; cures superbly rich, with a yellow flesh, tender and rich in sugar juice. Skin very tender, at first of a light purple, tinted with green, changing at maturity to dark purple, covered with a thick white bloom.

Form ovoid; slightly flattened, measuring five by six and a half inches in circumference. Average size fifteen to the pound, which is two or three times larger than the French prune.

Fruit stalk short, severs very easily from the stem as the fruit reaches maturity. Pit medium size, flattened, slightly wrinkled and most often separated from the flesh. The skin is so thin or porous that the fruit begins to shrink on the tree fully as soon as ripe.

Tree an unusually vigorous grower and very productive. One pound green fruit makes 7½ ounces when dry. By the usual mode of curing one pound green would probably make one-half pound when cured.

Analysis of the fresh fruit at the State University disclosed the fact that it is nearly one-fourth sugar, the exact amount being 23.92 per cent; the average of sugar of the French prune being 18.53 per cent and of all prunes 15.33. A seedling of Petite and bids fair to revolutionize the prune industry of the world. Originated by Luther Burbank of Santa Rosa. We understand that a limited quantity of grafting wood of the "Sugar" prune will be offered to California growers next spring.

Secretary Lelong in writing Hon. S. F. Leib of Santa Clara Co. respecting the value of the celebrated French "Imperial epineuse," which was the largest, handsomest and best flavored prune before the "SUGAR" was known, received the following reply:

Oct. 20th, 1898.

"Dear Sir:—Your favor of 19th inst. with reference to Imperial epineuse prune is at hand. The tree is a good, stocky grower; its bearing qualities not yet demonstrated to be very good. Am afraid it is shy every other year; is a first class fruit when the same is successfully cured. It is a very hard fruit to dry; we are almost at our wit's end to know how to accomplish that result. It moulds very easily, and we have about concluded that one of two things will have to be done; either dry it in an evaporator, which of course is very costly, or else stack the prunes every night from the time they are put out until finished which is almost as much so.

"The prunes are very large and hence it takes several weeks to cure them. By the time all expenses are paid it is a serious question whether it does not eat up all the extra price that is received on this prune over the French prune, especially when it shall have become more common and the price will be more at a par with the smaller prunes.

"Mr. Luther Burbank, whose place at Santa Rosa I have visited this summer several times, has a new prune which I think will supplant it and all other varieties. It is, I think, as large as the Imperial, and has ⅓ more sugar than either it or the French prune and ripens in the latter end of July; so its drying is easily accomplished.

"Were I to extend my operations further in the dried fruit line I would certainly demonstrate whether it was a success in my locality and on my soil and if so would confine myself to it exclusively hereafter.

"I understand it has not yet been put upon the market, but I take this occasion to call the attention of fruit growers to it, as it surpasses anything in that line I have ever seen. I remain, Very truly yours,

S. F. LEIB.

ANALYSIS.

University of California, Agricultural Experiment Station,
College of Agriculture. F. W. Hilgard, Director.
Berkeley, Calif. August 19th, 1898.

Determination of Sugar in "SUGAR" prune; sample sent by Luther Burbank, Esq., Santa Rosa, Calif.

Sample partially dried, contains:

Total Sugar, in whole fresh fruit, per cent	23.92
French prunes, average Sugar, in whole fresh fruit, per cent	18.53
All prunes average Sugar, in whole fresh fruit, per cent	15.35

GEO. E. COLBY.

"Dear Mr. Burbank: You will see above the determination of sugar in your prune. The sample was shriveled a little on receipt, which accounts for the word 'partially dried.' The sugar percentage on a plump specimen would have been slightly less, probably very slightly.

"We have had occasionally a specimen of Prune d'Agen which would go as high in sugar as yours, but they too had probably lost some moisture by evaporation. The analysis shows that you can safely expect your prune to equal the very best (or rather the very highest sugar) the French has ever shown, and this in connection with size is something which I believe no other prune has ever shown. I must congratulate you most heartily upon this creation." Sincerely,

E. J. WICKSON.

"Luther Burbank will give to the world a wonderful creation in a few months. He has labored for sixteen years with the French prune in the endeavor to eradicate its many faults and combine all the good qualities it should possess. The French prune is not very long lived.

"Owing to its manner of growth there is too much pruning made necessary.

"The shape of the tree is decidedly bad, its root habits are faulty. The roots do not descend far enough into the earth after moisture. Late in the season, when other fruit trees are still vigorous its strength declines. The French prune should ripen one month earlier to be of greatest value in Sonoma county in order that drying might be completed before danger of rain.

"The fruit has no distinct flavor. It is simply sweet.

"The main virtue of the prune is that it is easily handled.

"Still another fault is that the fruit forms too far out on the branches and thus lessens the amount it should be capable of producing.

"Any one who takes things as they come is satisfied with the French prune, and of all the older prunes this one is the best.

"That, however, should not deter one from seeking to improve it.

"Nobody disclaims the fact that there are prunes which possess richer flavor than the French prune, others that are of larger size, still others that ripen earlier, and thus all along the line, his plan has been, to produce a prune possessing these various excellent qualities and blend them into one. When that is accomplished there will result something which will revolutionize prune growing, widen the market for this fruit and materially increase the prices and profits."—Santa Rosa *Republican.*

To the Editor:—Can you give me some information about Mr. Burbank's new prune, which he tells me ripens in July, and which he hopes to introduce this winter?—E. W. P. San Jose.

"We had the pleasure of examining this summer the fruit to which our correspondent alludes, and which Mr. Burbank then called the 'coming prune,' although we do not know that he regards that its permanent name. It ripens in July in Santa Rosa Valley, and is a very handsome, very dark-colored prune, and we expect it will dry nearly black.

"It is very large, as its length diameter is two inches and width diameter one and one-half inches. It is exceptionally fine in drying quality, for the fresh, ripe fruit showed on analysis 23.92 per cent of sugar, while the average of analyses of prune d'Agen is 18.53 per cent of sugar. Mr. Burbank says it dries better in the coast valleys than any other prune and that is strictly credible on the basis of its greater sugar, and consequent less evaporation needed to bring it to a keeping condition. We expect it will prove of great value."—*Pacific Rural Press.*

"The new prune you sent me came on August 9th. It is of large size, very sweet, and fully ripe for drying. The French prune that came with it, grown on same ground, was quite green yet and very small.

"Your new prune ripening so early in the season will be very valuable in localities where the French prune ripens too late for sun drying."—John Rock, Prest. California Nursery Co.

"Your large seedling of Petite (SUGAR) is a whopper and apparently very rich. It seems to fill the bill for a large size drying prune of dark color, and your 'PEARL' of 1898 should lead in the silver type."—E. J. Wickson.

"I have very carefully noted the qualities of this prune and believe it is one of the handsomest prunes of the French type that I have ever seen."—B. M. Lelong, Secretary of California State Board of Horticulture.

"Your sample of the new prune received. The flavor is most excellent, equal to the very finest French prune I ever tasted.

(Later)—"On testing it again, after dictating the above, I would pronounce it not only equal, but superior to any French prune I ever tasted."—S. F. Leib.

"A sample of your new prune has kept more than three weeks."—G. H. Clayson, Arizona.

The "SUGAR" prune may and probably will prove hardy and productive wherever the common European plums thrive. As a *market, table* and *dessert* fruit its earliness, unusual size, superlative beauty, fragrance, flavor and special nutritive value will make it of priceless value when fresh from the tree as well as in the form of cured prunes."

GRAFTING WOOD.

GRAFTING WOOD PER FOOT, $10. TWO FEET, $15. FIVE FEET, $30. TEN FEET, $50. FIFTY FEET, $200. ONE HUNDRED FEET, $350.

ALSO A FEW LARGE TWO-YEAR-OLD TREES ON PEACH ROOTS WITH BRANCHES CUT BACK NEARLY TO THE TRUNKS, NOW TWO TO THREE FEET HIGH, $25 EACH. THESE ARE TOO LARGE TO SHIP LONG DISTANCES.

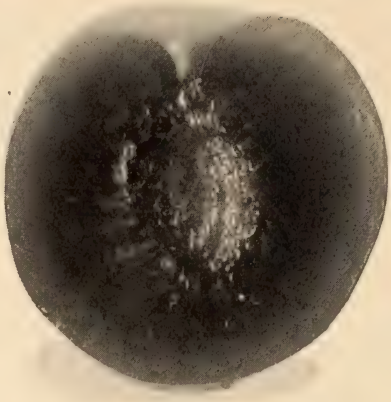
"The 'GIANT' prune went through the winter of 1896-7 without the least injury, and the thermometer registered as low as 20 degs. below zero, and the young scions set the spring before were white with blossoms and loaded with fruit which measured six to seven inches in circumference, and were grand."—A. A. Halladay, Vermont.

"'CHALCO' is a large, handsome, finely-flavored and delicious fruit."—Pinkham & McKevitt, Vacaville, Cal.

"The 'WICKSON' is a marvel of beauty and excellence."—S. W., Atlantic, Iowa.

A New Plum—"SULTAN."

SULTAN.



SULTAN. (SECTION).

This huge, oval, deep purplish crimson fruit is generally thought by those who have tested it to be the very best or one of the best plums produced.

The flesh is remarkably firm and solid, fragrant, subacid or sweet, dark crimson, beautifully clouded and shaded with light pink, salmon and light yellow; showing in the fruit a curious combination of ancestral dynamics.

Remarkable for the great proportion of flesh compared with the diminutive seed. The tree grows very rapidly, but is compact and with wood and leaves as much like the Napoleon cherry as like a plum. Exceedingly productive; ripening here July 25th, a week before BURBANK, falls like apples soon as ripe; a great keeper.

A basket of these plums would attract instant attention anywhere by their unusual size and remarkable beauty of form and color.

The cut at the left is from a photograph taken in Santa Rosa, the one at the right at the New York Agricultural Experiment Station.

"'SULTAN' is my choice of all the new plums which I have tested. It is a cross between Wickson and Satsuma. It is large, being over two inches in diameter and nearly round in shape. The surface is smooth, dark wine—red or garnet—being very handsome. The flesh is garnet color, too, and rich-looking. In flavor it is excellent, being tart enough, yet not sour, but a delicious subacid. No plum that I have eaten is better, and when cooked, it could scarcely be equaled. It has all the high flavor of Satsuma when cooked, which has heretofore been far above all other plums when in that condition. The season of 'SULTAN' is at least a month earlier, as it is fully ripe by August 1. The tree is very fruitful. I look for this plum to take a high place in public favor."—H. E. VanDeman in *Rural New Yorker.*

"The 'SULTAN' is very large, very handsome and has a very pleasing, refreshing flavor. It is extremely delicious."—S. F. Leib, Santa Clara Co., Cal.

"Needless to say that the quality is fine, it is all that could be desired."—S. D. Willard, New York.

"The 'SULTAN' came through in splendid shape and is a most wonderful fruit."—G. H. Clayson, Arizona.

"The 'SULTAN' seems to be a grand fruit in size and otherwise."—E. J. Wickson.

"The 'SULTAN' which measured 7x7 inches around will certainly be a leader, not only for its size but for its exceedingly high quality and very small pit."—H. Knudson, Brown Co., Minn.

"'SULTAN' arrived in excellent condition. I consider it the best in quality of the hybrids of Japanese plums which I have had the privilege of testing."—S. A. Beach, New York Agricultural Experiment Station.

"I am impatient to see these varieties promptly introduced to the trade not so much that I wish to grow them myself, but I want the public to be getting the good of them, at the same time think you are first to be considered."—F. A. Waugh, Vermont State Ag'l. College.

GRAFTING WOOD ONLY.

PRICE, ONE FOOT, $3. TWO FEET, $5. FIVE FEET, $8. TEN FEET, $10.

"'GIANT' has fruited here; fully up to expectations."—S. D. Willard, Geneva, N. Y.

"I am more than pleased with 'CHALCO.' It is a grand plum."—S. W. Hoyt, Vacaville, Cal.

"Ripe 'BURBANK' plums kept in good condition for thirty-six days after received. This speaks volumes for this excellent variety."—*North American Horticulturist.*

"'WICKSON' bears the largest plums we have ever seen; 22 deg. below zero did not even brown the pith of the late shoots. Bears very well."—C. M. Stark, in *Rural New Yorker.*

"Forty sorts were tested. Four out of five directors said 'BURBANK' was the best canner."—President of a large New York Cannery.

"I sold 'WICKSONS' yesterday in New York at $4.75 per 20 lbs. crate. I put them in on the strength of your recommendation and they are just as you stated 'productive and large.'"—S. W. Hoyt, Vacaville.

"(Later)—'WICKSON' sold yesterday in New York for $8.50 the biggest price ever yet brought for a crate of fruit."—S. W. Hoyt, Vacaville, Cal.

A New Plum—THE "BARTLETT."

The wonderful combinations which can be made in fruits, will always be a surprise, even to those who have studiously prepared the way for them. Who could have believed that a plum would ever be produced which would in quality, flavor and fragrance be exactly like the ever-popular Bartlett pear? Yet, such are the facts, but the "BARTLETT" plum is so much superior to the Bartlett pear in its own peculiar fragrance and flavor, that no one will ever eat the pear if this plum is at hand; and, better yet, it bears the second season, and will produce more fruit in ten years than the Bartlett pear will in twenty. Strange to say, the tree also grows upright, like its namesake the pear, and with its dark green leaves, which glisten as if highly polished, makes an ornamental tree almost unequaled.

BARTLETT.

The fruit is oval, yellow mostly overspread with crimson, turning to deep crimson when fully ripe, with flakes and dots of yellow.

Light salmon colored flesh, rather firm yet juicy.

Seed medium size, long flat, semi-free. Ripens just before the "BURBANK." Cross of Simoni and one of my older hybrids, the "Delaware."

"The 'BARTLETT' plum is a perfect freestone, very beautiful in color, of extra fine quality, just like a Bartlett pear."—H. Knudson, Minn.

" BARTLETT.—A hybrid of Prunus Simoni and ' Delaware,' itself one of Burbank's older crossbred plums.

" Fruit oval, conical, medium size, light yellowish crimson, with a smooth, polished, glistening skin. All the branches grow up perfectly straight, forming a dense, upright, handsome head.

" Leaves large, and as glossy as if varnished. Produces fruit abundantly the second season. The size of a large Imperial gage, and when fresh from the tree, of most delicious flavor; very far exceeding the Bartlett pear at its very best in its rich, delicious, indescribable, pineapple flavor and fragrance, being exactly like the Bartlett pear in flavor but, even more delicious. Very productive; too soft for distant shipping. Originated by Luther Burbank of Santa Rosa."—From report of B. M. Lelong of the California State Board of Horticulture.

" ' BARTLETT ' is another variety which came from a cross of Simon upon Delaware. Its size is medium to large and the shape peculiar, being decidedly heart-shaped, with a distinct suture on one side. The color is a dull purplish red. The flesh is yellowish and soft when fully ripe. The stone is large and long. Its flavor is very peculiar, being like that of the Bartlett pear, hence the name. The quality is very good to best, which, with its earliness (it ripens July 25 at Santa Rosa), productiveness and vigor of tree ought to place it well up in the scale."—H. E. VanDeman.

" The 'BARTLETT ' plum is apparently absolutely identical with a real Bartlett pear."—S. F. Leib.

" I am especially surprised at the good quality of the Simoni crosses."—F. A. Waugh, Vermont Agricultural Experiment Station.

" The flavor of the ' BARTLETT ' plum is unique."—Pinkham & McKevitt, Vacaville, Cal.

" Take some of these plums with sugar and cream, as peaches are nearly always dressed, and they are as much finer than the peach is finer than a potato. It seems to me that there are more wonderful possibilities in the plum than any other fruit in temperate climates."—F. A. Waugh, Vermont State Ag'l. College.

" Nothing like his latest wonder, the ' BARTLETT ' plum, has ever before been produced, and the world of fruit and flower growers, who so expectantly wait for his magical productions, will here read of the marvel for the first time. A wonderful combination of fruit is this, in reality a plum, but in quality almost the exact counterpart of the pear from which it is named."—Santa Rosa *Republican.*

GRAFTING WOOD ONLY.

THERE IS ONLY A LITTLE BUNDLE OF GRAFTING WOOD OF THE " BARTLETT " IN EXISTENCE.

PRICE, ONE FOOT, $3. TWO FEET, $5. FIVE FEET, $8. TEN FEET, $10.

" On Tuesday, August 3, another banner sale of Vacaville fruit took place in New York and, says the ' Reporter,' H. A. Bassford is the man who now wears the championship belt. Two weeks ago it was reported that F. Herbert Buck, through Pinkham & McKevitt, sold three 20-pound boxes of Wickson plums for $8.50 a box. Now H. A. Bassford, through the Earl Fruit Company, has raised this most remarkable sale up one notch. On Tuesday five 20-pound boxes of his celebrated Eureka (?) (Wickson) plums brought $8.55 apiece. The crates contained 88 plums each which at the price named would be over 10 cents each, or 42¾ cents per pound wholesale. We say, continues the Vacaville Reporter, without fear of contradiction, that this price has never been beaten by California fruit in the east except on the shipment of the first box of cherries at the opening of a season, and these prices are also always captured by Vacaville people." —*California Fruit Grower.*

"Of all plums grown so far, the Wickson stands at the head. The grandest tree in growth, the largest fruit, the finest flavor, the most prodigious bearer of all the plum family. I am advertising it as the King of Fruits for this country.

" It is a seedling originated by the Hon. Luther Burbank, of California, and of hundreds of new fruits he has introduced this stands pre-eminent. He is justly called the ' Wizard of Horticulture,' as no man has done so much to bless the world in the line of Horticulture as he. If he had only given us the one new plum, The Wickson, we should then say, all honor to Luther Burbank."

A New Plum—"SHIRO."

This handsome plum is a tri-specific hybrid—a combination of Robinson, Myrobolan and Wickson, from seed of Wickson.

In foliage, growth and general appearance the tree most resembles a Myrobolan, but is a much stronger grower than any of the three from which it came; wood very hard and wiry, ripening up early in the fall.

The fruit, which is produced in the utmost profusion, is medium to large, very uniform in size, clear light yellow, with an almost imperceptible thin white bloom; and so transparent that the pit can be seen through the flesh, which is firm yet juicy, rich, pleasant subacid, clingstone; ripens two weeks before the Burbank, and is nearly, or perhaps quite as productive. The fruit will keep in good condition for a month at least.

From its ancestry and general appearance it should prove of great value where it is too cold to raise most of the good plums.

SHIRO.

The following description of "SHIRO" is from the report of Secretary B. M. Lelong, of the California State Board of Horticulture:

"'SHIRO.'—From Myrobolan, Wickson and Robinson. Fruit, egg-shaped, medium size, suture indistinct; smooth, bright yellow, transparent, bloom thin, white; cling, quality good. Remarkable for its great productiveness, rivaling the Burbank in this respect.

"Strong grower, having the appearance of a gigantic Myrobolan plum in leaf, fruit and growth."

Originated by Luther Burbank of Santa Rosa.

GRAFTING WOOD ONLY.

PRICE, ONE FOOT, $1. FIVE FEET, $3. TEN FEET, $5. FIFTY FEET, $15. ONE HUNDRED FEET, $25.

"If any one has had doubts as to the hardiness of the Japan plums the season of 1896 has settled them here in Connecticut; Where the peach crop was practically a total failure, the Japan plums gave partial crops on many trees while others were full to bending with luscious fruit. There is no doubt that their introduction is doing more to stimulate both commercial and amateur fruit culture than any other one event that has taken place within the last quarter of a century. Trees of tremendous vigor, come into bearing two or three years after planting and in such variety and season of ripening as to cover a period of nearly three months with a daily supply of most luscious plums."—J. H. Hale in *Green's Fruit Grower.*

"Looking over the field of fruits I think the most notable advance has been with plums."—Joseph Meehan, Penn.

"To produce these valuable variations from their original types, requires not only the most extensive experiments in crossing the flowers, but in labeling, recording, saving seeds, planting and growing to fruiting age, but it takes patience! patience!! patience!!!

"No one who has never tried it can have more than a slight conception of the industry, skill and patience that such work requires."—H. E. VanDeman in *Green's Fruit Grower.*

"I was the first man to set a 'BURBANK' plum on the Atlantic slope and it is a fact that nearly all the varieties have been raised as perfectly at Geneva, N. Y., as in their California home."—Hon. N. S. Platt, Chairman of Committee on New Fruits at Fitchburg, Mass.

"New Japans stood 26 deg. below zero here."—Dr. A. B. Dennis, Cedar Rapids, Iowa.

A New Quince—"PINEAPPLE."

Quinces can probably be grown with less expense than any other fruit, and if the quality could be improved, would be extensively grown and more generally used; a more promising fruit for improvement cannot be named.

For about fifteen years we have been working in this direction, and have succeeded in obtaining the "PINEAPPLE," a quince which will cook as tender in five minutes as the best of cooking apples, and with a flavor never before equaled.

Jelly made from it is superior to that made from any known fruit—absolutely unapproachable—something which could never have been thought of until it was brought into existence.

The fruit, in form and size, very much resembles the Orange quince, but smoother and more globular; in color much lighter yellow; average weight about three-quarters of a pound each.

The tree is a strong grower, and as productive as the Orange.

Some one may produce a better quince, we never expect to.

"Luther Burbank of Santa Rosa, Cal., sent a fine display of a new quince of his own origination, which he has named 'PINEAPPLE.'

"It was never before shown to the public. It is large, apple-shaped, very clear yellow and of so mild a flavor that it can be eaten like an apple."—Report of Committee on New Fruits at 1896 meeting of the American Institute.

"The quinces came to-day, they had the most delightful pineapple flavor I ever breathed."—S. F. Leib.

"The jelly which my wife made from the 'PINEAPPLE' quinces which you sent me, was the finest flavored jelly of any description or from any fruit, which I ever ate in my life. The jelly from quinces generally is too pronounced and strong. That made from this variety had a delicacy and an exquisite flavor absolutely unequaled by that made from any other quince, or, in fact, from any other fruit which I ever tasted."—S. F. Leib, Santa Clara Co.

"A new variety of quince called the 'PINEAPPLE' is remarkable for size, beauty of form, productiveness and small core. It will cook tender in five minutes, whereas, the ordinary quince requires from one to two hours. It is also good to eat raw, and has a delicious flavor. This is one of the most important improvements in fruit in the history of horticulture."—San Francisco *Post Magazine.*

"Mr. Burbank's New Quince.—The quince is not a popular fruit in Sonoma County's horticultural realm. A quince is a quince the world over, tart, hard and limited in usefulness. If one could pluck a quince from a tree and eat it as an apple, if it was of delightful flavor, soft and mellow as a Christmas apple, it would be grown on every hillside and in every valley. Such a fruit has been perfected and is destined to be cultivated extensively, not only within the confines of our county, but wherever fruit is grown in the temperate and sub-tropic zones. Our fellow townsman, Luther Burbank, gave this great discovery to the world. For many years he has labored with the end in view to produce a quince possessing all these excellent properties. Varieties from all over the world were obtained and grown. By cross-breeding and selections through many generations of experiment the goal was neared, but not until the present season was success attained. This year he produced in his Gold Ridge experiment grounds what he strived for through these many years, a quince that possessed the flavor of the best of its species, but which is mellow and soft as an apple and may be cooked in from three to five minutes. When this variety is introduced it promises to revolutionize quince culture."—Santa Rosa *Republican.*

"Sample 'PINEAPPLE' quince received, we did not make jelly out of it as what we received seemed hardly enough. We ate some from hand and tried some baked. The flavor was exquisite."—W. T. Smith & Co., Geneva, New York.

"The fruit is too good for jelly making. It should be used to eat green, as an apple."—S. W. Hoyt, Vacaville.

PRICES.

STRAIGHT, THRIFTY TREES, ONE YEAR OLD, TWO TO THREE FEET, EACH $1. SIX, $5. TEN, $8.

STRONG, HEAVY CUTTINGS, 8 INCHES LONG, TEN FOR 75 CTS. PER HUNDRED, $6. PER THOUSAND, $40.

A FEW VERY LARGE TWO-YEAR-OLD TREES, $3 EACH. THESE ARE TOO LARGE TO SHIP LONG DISTANCES.

STORY OF ONE POTATO SEED.

From the *San Francisco Call.*

A tiny seed may feed a nation!

An atom of vegetable life may evolve results of universal benefit to mankind.

Twenty-three years ago last May a New England youth living not far from Boston, in the "Old Bay State," held in his hand a single seed about half as large as an ordinary pinhead. It would have taken several hundred of similar size to make a meal for a canary.

To the ordinary observer the seed would have seemed to differ in no respect from others of its kind, but the youth, who scrutinized it through the eye of genius, thought he had good reasons for believing that it deserved a better fate than to be fed to the birds, and it was therefore carefully planted and tenderly watched all through that New England summer of 1874—and millions of his fellow men have the benefits wrought by the prescience of a youthful enthusiast then on the threshold of renown in his chosen field of science.

When the hazy Indian summer came the plant had done its work, and three and one-fourth pounds of the most beautiful white potatoes which had ever been seen were the product of the little seed.

The tubers were planted and replanted, and when the second season had passed two tons was the crop which a prominent Eastern seedsman purchased and introduced to the public in the spring of 1876.

The new potato was such an evident improvement upon any tuber of its kind ever known theretofore that it immediately sprang into favor in all parts of America, and it was not long ere its superior qualities became known in all other countries where the potato is grown.

Such is the genesis of the Burbank potato—named in honor of its originator, Luther Burbank, of Santa Rosa.

The young New Englander who made this fortunate experiment so many years ago has since become famous among the world's savants in the same line of scientific experiment. Many times has he thrilled the scientists of the vegetable world by the announcement of a new and distinct species—the creation of such being the principal aim of his professional life—and rich have been the honors showered upon him by his fellow scientists and the world at large for his brilliant achievements in the propagation of new fruits, flowers and vegetables, but it is safe to say that no product of his genius has wrought so

much of material good to Christendom as has the potato which bears his name.

More than two hundred million bushels of the Burbank potato are now grown every year, and by a most careful and conservative estimate, made from reliable statistics, the amount of this variety which has been grown since its introduction is considerably more than two billion seven hundred million bushels, or one hundred and sixty-two trillion pounds—enough to give every inhabitant of this earth nearly two bushels.

From the figures quoted above it will be seen that enough Burbank potatoes have been produced (counting one pound laid lengthwise to measure one foot) to reach twelve hundred and twenty-seven times around the world, and more than one hundred and twenty times the distance to the moon.

The price paid the young propagator for this potato, which is yet in its prime and which has added to the wealth of all nations and will doubtless augment the wealth of nations yet unborn, was $150. The reader may ponder the consequences to the race if, by carelessness or ignorance, this little seed had been lost or destroyed.

Mr. Burbank now handles, nearly every day, seeds as precious in potentialities as was the subject of this sketch—seeds which hold within themselves forces calculated to sway the destinies of mankind and even to affect the weal of nations.

TWO NEW ROSES.

Last season we introduced the truly ever-blooming rose "SANTA ROSA." It at once attracted wide attention for its vigor, brilliancy of color and wonderful blooming qualities, and it seems necessary to call attention to the fact that the two new roses, one the "BURBANK," purchased and named by W. Atlee Burpee & Co., of Philadelphia, and the other the "SANTA ROSA," sent out by ourselves last season, though coming from the same combination are quite different in form and color of flower, growth and other respects. Both are perfect gems, and no other rose will give greater satisfaction than these will when once established; they are not only in name but in fact absolutely continuous bloomers throughout every day of the year, and without doubt will produce far more blooms during the whole year than any rose before known. It is beyond comprehension how any plant can keep up such a constant exhibition of lovely flowers as these do and still remain in the most perfect vigor of health; not a leaf has ever shown rust, mildew or other weakness or defect on thousands of the plants during all their past five years of existence.

Of "SANTA ROSA," the ABSOLUTELY EVER-BLOOMING rose of loveliest form and color, we have very large field-grown bushes only, to offer this season. PRICE, EACH $1. PER TEN, $5. Address W. Atlee Burpee & Co., Philadelphia, Pa., if you wish for the "Burbank" rose; we have none of them for sale.

"It is fitting that the fairest rose in the world, should borrow from this fair city its name and title. To-morrow it will go where the winds go. Under every flag this rose will make its home and win esteem."—Santa Rosa *Republican.*

"The 'SANTA ROSA' rose is in great demand. The creation is a wonderful one and wherever the rose blooms, in distant climes, the name stamps it as an advertisement of the beautiful city from which it gets its name."—Santa Rosa *Press Democrat.*

"Mr. Burbank's ROSES are famous the world over. They nod at us from every garden and florist's window."—Carmen Harcourt, in *Post Magazine.*

"The 'Burbank' Rose is perfectly hardy. The plants begin to bloom when only a few inches high and flower most profusely all through the spring and summer until stopped by heavy frost, late in the autumn. We had a bed at Fordhook, which furnished a constant supply of beautiful flowers for cutting all summer, and at this writing (November 23rd, 1897) is still in bloom, quite a fall of snow to-day and yet the original bush is also still in bloom."—W. Atlee Burpee, Philadelphia.

"The BURBANK ROSE is thus really an almost perpetual bloomer."—*American Gardening.*

"The new 'SANTA ROSA' is making a good growth and is very fine."—Geo. W. Livingston, Monroe, Iowa.

"The 'BURBANK' ROSE is without exception the freest flowering rose in cultivation. The flowers are double, of fine form, nearly three inches across. The color is a deep rose-pink, shading to a beautiful soft rose at the center. The petals are well incurved so that the center is hidden. In September and October the outer petals change to a deep rich carmine. The whole flower is most pleasing in its rich, graceful beauty, and is delightfully fragrant."—W. Atlee Burpee.

"The brightness of the color is very striking; the tint appears to deepen into a glow at the base of each petal, and under artificial light the effect is intensified."—*American Gardening.*

GALIUM BOREALE.

A most charming, feathery, white flower for bouquets. It is a perennial fifteen inches in height, and, unlike most galiums, it grows upright, without any support. It is hardy everywhere, as it was found growing wild on the banks of the North Saskatchewan river, where the thermometer often goes 60 degs. below zero in the winter.

SMALL PLANTS, 50c. each. SEEDS, 25c. per package.

AMPELOPSIS QUINQUEFOLIA.

We have selected an especially fine "Virginia Creeper." It grows with unusual vigor, clings to any support better than usual, and the leaf colors in the fall are also especially fine. Thrifty one-year-old plants. Each, 25c. Ten, $1. One hundred, $5.

MARITIMA PLUM.

Fine one-year-old seedlings, of the dwarf, hardy, late blooming Beach plum, from selected varieties; these bear good fruit very abundantly the second or third year.

PRICE PER TEN, 75c. PER 100, $4. PER 1,000, $20.

ALASKA JUNEBERRY "SUCCESS."

The "SUCCESS" Juneberry produces larger, better and more fruit than any other Juneberry; perfectly hardy everywhere, grows anywhere, and bears the second season. Plants, each, 25c. Ten, $1. One hundred, $5.

HYBRID WALNUTS—"ROYAL" AND "PARADOX."

"ROYAL." One and two-year trees, each, 50c. Ten, $2.50.

"PARADOX." One-year trees only. Each, $1. Ten, $8.

No nuts for sale this season, as the entire crop was purchased by J. M. Thorburn & Co., of New York.

CALLA "FRAGRANCE."

A novelty of last year which is gaining wide appreciation for its *fragrance* and abundance of flowers. Price, dormant bulbs, one inch diameter, each 50c. Ten, $3. One hundred, $20. One-half inch diameter, each, 25c. Ten, $1.50. One hundred, $10. Bulblets: Ten, 40c. One hundred, $3. One thousand, $20.

MISCELLANEOUS.

A few strong field-grown bulbs and plants can be supplied while they last. *We do not have trees, plants or bulbs for sale except the surplus named below.*

Agapanthus. Seedlings varying from sky blue to white. Each, 25c. Ten, $1. One hundred, $6.

Amaryllis Belladonna minor, each 25c. Ten, $1. One hundred, $5.

Amaryllis Belladonna major, each 25c. Ten, $1. One hundred, $5.

Amaryllis Vittata hybrida. Seedlings, each 40c. Ten, $3. One hundred, $25.

Cannas, five choice new varieties, each 25c. All five for $1.

Bidens atrosanguinea (black dahlia), each 25c. Ten, $1.50.

Clematis, Jackman hybrids, each 40c. Ten, $2.

Clematis, Erecta, each 30c. Ten, $1.50.

Clematis, Mongolica, each 30c. Ten, $150.

Clematis, Fremonti, each 30c. Ten, $1.50.

Dracoenas, hardy (in California), cross-bred varieties of Veitchi, Longifolia, Stricta and others; easily grown; fine for house decoration. Each 25c. Ten, $1.50. One hundred, $15. One thousand, $40.

Dahlia. Mexican wild. Each 20c. Ten, $1.50.

Hemerocallis flava (Lemon lily). Each 20c. Ten, $1.

Hemerocallis Middendorfiana. Each 20c. Ten, $1.

Hemerocallis Aurantiaca major. Each 60c. Ten, $3.

Iris Kaempferi, seedlings. Each 20c. Ten, $1.50.

Lilium pardalinum. Hardy native Leopard lily. Each 20c. Ten, $1. One hundred, $4. One thousand, $25.

Platycodon Mariesi (Balloon flower). Each 20c. Ten, $1.50.

Potato. Mexican wild. Each 20c. Ten, $1.

Richardia albo maculata (spotted calla). Each 10c. Ten, 50c. One hundred, $3.

Richardia Hastata (yellow calla). Each 25c. Ten, $1.50. One hundred, $10.

Richardia Aurata (yellow calla). Each 40c. Ten, $3. One hundred, $20.

Richardia, Lemon Giant (yellow calla). Each 60c. Ten, $4. One hundred, $30.

Rose, Alaska wild; quite dwarf, large single rose, pink flowers. Each 25c.

Tigridia, Van Houttei; rare, curious small flowers. Each 15c. Ten, 75c. One hundred, $5.

Vitis Coignetiæ. The new Japanese high-climbing grape, with brilliant autumn foliage. Large plants, each 60c.

"We have no words to express our appreciation for your great work in horticulture."—J. F. Martin, Winfield, Kans.

"'WICKSON' fruited with me last season, and is the most precocious and beautiful of the Japs I have seen. Although peaches and the Robinson plums rotted all around, the 'WICKSON' remained exempt."—Geo. E. Murrell, Secretary Virginia State Horticultural Society.

"The Burbank potato still lives and thrives. Have endeavored to have a monument, or memorial tablet erected to mark the spot where it had its birth."—J. J. H. Gregory, Marblehead, Mass.

"Loss of about a million trees by a sudden cold snap. 'Gold' unhurt, doing fine."—Prest. of Idaho Horticultural Society.

"Your 'WICKSON' plum has been a wonderful success with us, from scions you sent us two years ago, we sent fifteen bushels of splendid fruit to market."—Henry Woodhouse, Sackville Reach, Australia.

"If all men were as energetic and persistent in some efforts to improve something which has to do with the comfort of humanity, in any way, as you are, the millenium would not be far off."—H. G. Keesling, Edenvale, Cal.

"Could sell a thousand bushels of Burbank plums here."—B. L. Ferris, Christian Co., Mo.

NEW CREATIONS FOR 1900.

HYBRID OF WAGER PEACH X LANGUEDOC ALMOND. ONE-HALF NATURAL SIZE.

In addition to the trees and plants offered this season, we mention some which are not yet for sale, in any quantity less than the whole stock, with complete control. Prices of each will be given on application.

NEW WINTER APPLE.

Of the Gravenstein type. The tree is about the best grower and bearer that we have ever seen. Fruit of superior quality.

Editor of *Rural New Yorker* says: "The flesh is yellowish, exceedingly tender, spicy, rich, subacid; it has a flavor all its own, and we do not think, taking it all in all, that we have ever eaten an apple that more nearly approaches all we need ever hope to get in an apple."

NEW HYBRID PLUM, No. 38,674.

Of enormous size. Prof. E. J. Wickson, of the California State Agricultural College, says: "It is immense, and strikingly handsome. The flesh is nearer like a white, juicy peach than anything I ever saw in a plum. On size and appearance it strikes me this is the most wonderful plum I ever saw."

Prof. F. A. Waugh, of the Vermont Agricultural College, and Hon. S. F. Leib, of California, both of whom are familiar with many of our best new plums, were also greatly impressed with its value.

NEW HYBRID PLUM, No. 31,288.

Medium size, superior quality, earlier than the earliest. The names of these new plums could be published here, but they would be promptly appropriated, so we refrain.

NEW ORIENTAL POPPY.

With flowers fully two feet in circumference, and of a peculiar, unspotted, fiery, salmon-scarlet color, with crushed leaf effect; exceedingly free blooming; perennial. Stock about one hundred strong two-year-old plants.

NEW HYBRID TIGRIDIAS. John Lewis Childs

Wonderful bloomers, with exquisite new combinations of color never before seen in Tigridias. It is amazing that such a beautiful and easily grown bulbous plant should have been so long overlooked.

A whole rainbow of combinations, and more easily grown than potatoes.

The popular Gladiolus may now give first place to these gorgeous GRANDIFLORA HYBRID TIGRIDIAS for bedding purposes. Stock about 10,000 bulbs.

NEW HYBRID CLEMATIS. J. C. Vaughn

Produced by crossing VIORNA, COCCINEA, FREMONTI AND OTHERS.

The flowers, which are produced abundantly, have new forms and new shades and combinations of colors. Hardy, healthy, vigorous; growing when established almost as fast as hop vines. Stock, one to two thousand plants.

NEW CANNA. J. R. Pierson

Of the Crozy type, height 3½ feet. Vermilion salmon color, with broad light yellow band around each petal. Produces the largest flowers in the greatest profusion, the most constantly of any canna yet produced. Its most remarkable characteristics cannot be described in a few words.

Those who know of the "TARRYTOWN," which originated on our farms four years ago, are in a position to judge whether we can produce good cannas. Stock about two thousand plants.

F. R. Pierson, of Tarrytown-on-Hudson, New York, was the purchaser of "TARRYTOWN." We have none for sale. Price of this BRAND-NEW ONE will be given on application.

"'TARRYTOWN.'—This variety is one of the very finest cannas for bedding coming nearer the ideal in this respect than any variety that has ever been introduced. It is a very dwarf grower, at the same time, vigorous, with fine healthy foliage, is a wonderfully free bloomer, and has the remarkable quality of holding the flowers apparently perpetually, the blooms lasting two or three times as long as those of any other variety, standing wind and rain without any apparent injury, coming out bright and fresh after a heavy storm, when other varieties look rough and ragged. The flower spikes are thrown up in a solid mass as if sheared, making it a fine, compact, massing variety. It is entirely distinct from any other canna in color, being a brilliant cherry-red very similar to Egandale, but much more brilliant. We had a large quantity planted for trial this season, together with other varieties, and it came into flower earlier than any other variety. From the earliest time in the spring until late fall, it was the showiest of all our cannas, standing out prominently and conspicuously among the very finest varieties, so that visitors at a distance would exclaim, 'What canna is that?' No canna in our trial grounds this year has proved so satisfactory an all-round bedding variety as 'TARRYTOWN.'"—F. R. Pierson, N. Y.

"'TARRYTOWN' is one of the gems in its color, a brilliant cherry-red with fine branching heads. The flowers come in early and freely and have remarkable lasting qualities. It is a dwarf, vigorous grower, with fine healthy foliage."—*Florist's Exchange.*

"'TARRYTOWN.'—This variety comes as near the ideal for a bedding canna as any variety that has been introduced. In color it is entirely distinct, being a brilliant cherry-red, similar to Egandale, but more brilliant. It is a dwarf, sturdy, vigorous, compact grower, with fine healthy foliage, and an exceedingly free bloomer, the blooms lasting longer than many other varieties. They, when past their prime, leave the flower spike clean. The spikes of flowers are borne in dense even masses, and one of its valuable characteristics is the fact that wind and rain seem to have no effect on the flowers. It also comes into flower with the earliest varieties. From the earliest time in the spring until late in the fall, it presents a showy and conspicuous mass of blooms."—C. W. Ward.

"One of the most imposing cannas this season and which has proved its great value as a bedder, is 'TARRYTOWN'—a cherry-red flower, borne well up above dark green foliage. The old flowers drop away clean and the spikes stand the weather well. As an individual flower spike, when cut, the variety is not so telling, but as a bedding variety, of medium height, it has no equal at present."—*Florist's Exchange.*

"I saw 'TARRYTOWN' at Riverton, two weeks ago, where rain has been badly needed; every leaf stood upright, fresh and green, while many other sorts near and alongside of it were badly wilted. It's a fine canna indeed and will stay with us."—*Florist's Exchange.*

"The originator of the finest cannas ever introduced."—Martin J. Abney, Athens, Ga.

THE 1901

SUPPLEMENT TO

NEW CREATIONS

IN

Fruits *and* Flowers

The Original "Burbank" Plum Tree, now sixteen years of age. It has never failed to produce a full crop of good fruit. This picture was taken just after the first thinning and the ground under the tree is covered two deep with the plums. All the millions of Burbank plum trees in the world came from this tree, which takes its present form from the severe cutting for buds and grafts which it experienced in its youth.

"Half the flora of the world still contains the riddle of the Sphinx. Three thousand years of study and experiment have merely brought a handful of species of plants into successful cultivation, while the vast majority hold their secret for future generations to solve. In the economy of nature they only work out their purpose half-heartedly, and often to the detriment of those who are placed as guardians over them. They are still the wild, sour grapes of the primitive forest, or the bitter, acid fruits of the thorn-apple tree."—"Lippincott's."

Burbank's Experiment Farms

LUTHER BURBANK

Office and Residence, 204 Santa Rosa Avenue

SANTA ROSA, Sonoma County California, U. S. A.

GEO. RICE & SONS, INC., L. A.

"No man living or dead has done so much to make scientific plant breeding a reality. He lives today the chief inspiration and example of those who by artificial aid to natural law would hasten the coming of ideal excellence."—"The Fruitman."

"It is pleasant to turn from the distracting and corrupting influences of politics and current affairs, to the work of a genuine benefactor of the race, such as Luther Burbank of Santa Rosa, who is contributing to the welfare of the world to a degree impossible to estimate. Outside of Edison's laboratory, there is no place in America of interest equal to Burbank's experimental gardens."—"Santa Cruz Surf."

"The creations of the horticultural wizard are so wonderful that even science has to be convinced. An amusing incident in the visit of the Associated Agricultural Colleges and Experiment Stations of America to the Sebastopol grounds gives a fair illustration. When the party had traversed but a small portion of the grounds and tested but a few of the fruits therein, one of the professors called a halt, requesting from his brethren their brief attention. Calling upon Mr. Burbank to step forward so that all might the better view him, the producer of the wonders, he delivered the following: 'Gentlemen: In the presence of you all I wish to make known that one of my objects in coming to this coast was to expose Mr. Burbank's fraud. I have read that man's catalogue annually, and I have long considered him about the biggest liar in the United States. I now retract all that, and declare that Mr. Burbank has never told one-half of the marvels that he might. Gentlemen, hats off to the wizard before you.' The motion needed no second."—"Santa Rosa Republican."

"What Nature will do for us running loaded trains of profit in our direction, cannot be guessed until we turn the switch. The finest fruits the world ever saw are en route. They are moving manward among the mighty certainties of the future. Who will set the switch and deftly sidetrack them in our yards? While fruit men were testing grapes in America with dubious prospects, Mr. Bull of Concord shifted the rails and brought to our very doors the fabulous fruitage of the Orient. Gideon of Minnesota blindly grabbed the lever at a happy moment, and switched into the homes of the northwest uncounted carloads of the Wealthy. Budd switched onto our northwestern spur the Hibernal, and with it hope for the apple grower of Manitoba. Burbank, with the foresight of a seer and a skill beyond precedent, seems able to realize all our dreams of perfection by running the finished forms of fruit and flower of the whole earth into the great central depot of the United States. And there are others listening for the roar of the coming trains, and trying with might and main to shift the rails. If you want any part in the twentieth century jubilee, take hold with a will and help switch onto our sidetrack the train of success."—"The Fruitman."

EDUCATION AND SELECTION are the two greatest forces used in the production of all these fruits and flowers. Not knowing the facts, and because some of them happen to be crossed, people often jump at the conclusion that they are summarily produced by crossing, with about as little science or ceremony as a wizard would appear to do it with his magic wand.

VISITORS to our grounds are not allowed, as no possible benefit can accrue and we have no time to spare.

Applications for SAMPLE FRUITS cannot generally be complied with, as a small army of specially trained men would be required during the priceless hours of the ripening season, when the habits, peculiarities and probable comparative value of the many thousands of new fruits must be promptly, carefully, and very rapidly attended to.

ORDER EARLY AS POSSIBLE. Spring commences in California with February, and everything herein described must be carefully kept back by cold storage to supply Eastern and Foreign customers; we have arrangements, however, for keeping GRAFTING WOOD in the most perfect condition all through the season.

We hold all the stock of these novelties in existence; none of them can be obtained elsewhere on earth.

Everything described in this list will be *prepaid by mail or express* anywhere in the United States, Canada or Mexico.

NO RESTRICTIONS whatever; multiply and distribute *as fast as possible.*

TERMS INVARIABLY CASH; no time to keep books.

ALL THE CUTS USED IN THIS CATALOGUE ARE EXACT NATURAL SIZES, UNLESS OTHERWISE NOTED.

In consideration of careful handling and prompt delivery, I rather prefer that shipments go forward by Wells, Fargo & Co.'s Express. That company furnishes special rates; never above and in many instances much lower than U. S. mail rates. I also prefer that remittances be made (when possible) by express money orders, making same payable to my order, if not convenient then by bank draft, registered letter or Postoffice money orders.

TO CORRESPONDENTS

Kindly be as brief as possible. Ask no questions which you think can be answered elsewhere. With all the modern conveniences of graphophones, typewriters, &c., it is at times impossible to keep up.

Always write your questions on a postal card with spaces for reply, and whenever possible arrange the question so that it can be answered by yes or no. If a reply is desired which requires more space than a postal card affords, always enclose five dollars.

"Value for value is the rule that must finally obtain in all transactions, and it is the man who gives full value for what he receives who wins permanent prosperity."—W. Atlee Burpee.

"The best way to benefit the poor is to increase Nature's productions of the necessaries of life."

New Crossbred Peach, "Opulent"

THE surpassing value of the Muir—Wager class of peaches for hardiness, regular bearing, unusually small stone and firm, yellow, sugary flesh has made them very popular and the White Nectarine with its rare beauty, large size and rich, acid flesh, has never been surpassed. We thought a good combination of these two should produce a fruit for home use of surpassing excellence. Ten years have proved the value of the inspiration, and the best result of this work is the *"OPULENT"* peach, now offered for the first time.

The form and size are shown in the cut. Skin, creamy white, slightly downy and usually about half covered with crimson dots and blushes.

Flesh, light straw color throughout, fine texture, quite firm, yet unusually juicy and with a most exquisite commingling of the Muir peach sweetness and the acid of the White Nectarine, producing what may be called "a high vinous flavor." The very best of judges East, West, North and South say the fragrance and flavor is not possessed by any other peach, and no one can be induced to eat other peaches when *"OPULENT"* is at hand.

The stone is unusually small and parts perfectly from the flesh.

The fruit ripens here July 20th, just before Early Crawford. The tree is a good strong grower and bears more regularly than almost any other, except the Muir Wager class. After a thorough test of several years, not only by Californians, but by representatives of many Eastern colleges and Experiment Stations, I am thoroughly convinced that *"OPULENT"* should be grown by everybody. It is the first peach ever introduced from my grounds, and the best one I have ever yet produced.

Price, June bud trees: Each, $2; five, $8; ten, $15.

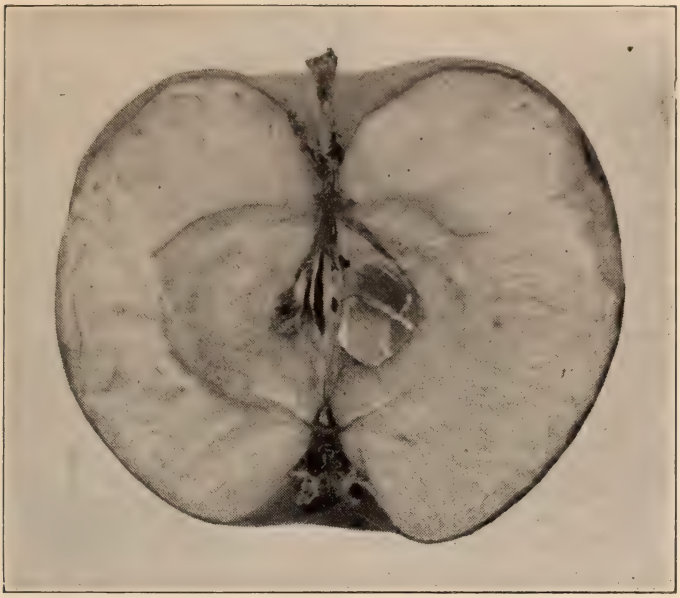
We do not fill this Catalogue with testimonials of the value of these new Fruits and Flowers, though we have enough to fill one twenty times as large.

The best way to judge of the value of any novelty is to look to its source, and the Fruits and Flowers which have been bred and educated on Burbank's Experiment Farms and now growing all around the world are the very best testimony which can be given. Nor do we send out seeds and grafts for trial, for when a fruit or flower is well tested it is already introduced and there would be no occasion for publishing these *"New Creations."*

"The demand for novelties is constantly increasing, and at no previous time have results in this direction met with so ready appreciation.

"The diversification and extension of fruit and vegetable industries into new regions creates a demand for varieties adapted to various conditions.

"As the conditions are numberless, the field for improvement seems almost inexhaustible. No branch of horticulture or agriculture promises more important and remunerative results than may be attained by intelligent plant breeding."—"New England Florist."



New Apple, Winterstein s

IT has often been said that if the Gravenstein lasted through the season no other apple need be raised. Other apples do not sell readily during the Gravenstein season. Its seedlings, however, very rarely even approach in any manner its combination of good qualities, and the one which I now offer is not in some respects as good, but is much better in others, it is therefore introduced after severe tests, fully believing that it will prove a great acquisition in many places, not all, for no fruit, so far, has ever been known which would.

One of its most valuable points is that it ripens, with Baldwin and Rhode Island Greening, several weeks after Gravenstein; but in addition to this it is a much more prolific bearer, never failing to produce heavy crops and at the same time makes a growth fully as strong as Gravenstein.

The general form and average size of the fruit is well represented by the above cut which was made by the "Rural New Yorker" from a specimen sent to Mr. E. S. Carman two years ago. I cannot more faithfully describe it than to quote his impressions of it as given in the "Rural New Yorker" at the time:

A Promising New Apple.

"We are wondering whether the horticultural and pomological work that Luther Burbank, of Santa Rosa, Cal., has done, is doing and may do, will ever be adequately appreciated. One thing is certain, viz.: that the work he has already done is by no means appreciated. His latest success, and it seems to the writer, one of his most valuable successes, is an apple—a seedling of Gravenstein, a specimen of which he sent to us, and which we received October 27th. We wrote as follows under date of October 17th:

" 'By this mail I send you a medium sample of my new Gravenstein seedling, six weeks later than its parent, ripening exactly with the Baldwin and Rhode Island Greening. The tree is a grand grower, and as productive as an apple can possibly be. I think the quality, tenderness and texture remarkable.'

"The apple, a half section of which is shown at Fig. 357, was slightly shriveled when it was received. The flesh is yellowish, exceedingly tender, spicy, rich, sub-acid. It has a flavor all its own, and we do think, taking it all and all, that we have never eaten an apple that more nearly approaches all that we need ever hope to get in an apple. In appearance and coloring, we may say in a word that it resembles the Ben Davis.

"How well this new-comer will thrive away from its native home, only years of trial can demonstrate. What it is in its native home Mr. Burbank has told us in a few words, and he is one who studiously avoids undue praise for his 'new creations.' "

This is the first apple of my own origination which has ever been sent out, though apples, plums, berries and various seeds and flowers have sometimes been offered under my name without consulting the party most likely to be interested in the matter. Grafting wood, per foot, $1; three feet, $2; five feet, $3; ten feet, $5.

New Plum, "First"

(No. 31,288 of 1899 New Creation)

SECOND generation combination cross of Hawkeye, Hammer, Milton, Wyant, Wayland and Burbank. In introducing this new plum I confidently make the statement that it is the EARLIEST OF ALL PLUMS: ripening here June 15th, fully three weeks earlier than Red June; and also that it is the largest, handsomest and most productive of all very early plums.

It is too soft and ripens too suddenly for shipping to distant markets, but its extreme earliness, large size and good quality make a combination of very unusual value. It blooms late and ripens in an incredibly short time after blooming, while fruit is scarce and all markets absolutely bare of plums; even the little Cherry plum makes its appearance a week or more later. The fruit is of good medium size—as represented above—pale amber, faint blush on the sunny side, half transparent. Flesh same color, moderately firm, sweet, juicy and good, especially so when just at the right stage of ripeness. Tree of medium growth, never fails to produce all it can hold.

It should prove very hardy, and for home use and near markets will be the most useful of all very early plums. A well-known California fruit grower offered Four Hundred Dollars (its weight in silver) for the small tree of *"FIRST"* three years ago. Grafting wood, per foot, $5; three feet, $9; five feet, $12; ten feet, $20.

"In connection with these experiments a remarkable condition exists and that is the reverence the small boy has for Burbank fruit. No heart is strong enough to escape temptation, yet there is no necessity for enforcing precautions."—"Santa Rosa Republican."

"Mr. Burbank refers to his productions in the plant world as 'New Creations,' which they are. He has created some plants which, were they found wild, would be termed new species; perhaps new genera. He has opened the eyes of every intelligent horticulturist and botanist to possibilities hardly dreamed of before he presented his interesting work. Such a man is entitled to great respect from his fellow-men, and I should like to see a good and substantial monument erected to him in the nation's capital, for his 'Creations' are a blessing to all mankind."—Prof. S. B. Green, Minn. Agricultural College.

New Plum "Combination"

AN extremely handsome, large, early, light crimson plum of the very best quality, ripening here July 12th, before most of the earliest plums and about as early as Climax. Four years out of five it was pronounced by well known plum growers the best plum they had ever tasted. The test was severe, as I had more than twenty-five thousand varieties bearing fruit, including nearly all the most popular standards of the past. One season, however, the fruit came in second in quality, probably from the fact that the trees had been shorn of nearly every bud for propagating purposes. The trees, both old and young, are about the best and most symmetrical growers among the plums, making an early, rapid growth, ripening the wood perfectly hard to the tips early in the season, indicating unusual hardiness. The bark, leaves and fruit are all unique. Bark, dark russet bronze. The unusually large, broad, glossy, coriaceous leaves are bronze crimson in the spring and fall.

Early, regular and abundant bearer of large, nearly globular fruit of uniform size. Flesh, straw color, extremely sweet, with a very pronounced pineapple flavor. Stone, small and nearly free when fully ripe, and if the best judges may be trusted, *"COMBINATION"* fruit has never been equaled in quality.

"COMBINATION" trees resemble no other trees in cultivation and are certain to please everybody. Grafting wood, per foot, $5; three feet, $9; five feet, $12; ten feet, $20.

New Asparagus "Quality"

MANY years ago, while experimenting for the improvement of Asparagus, one plant was observed which produced an unusual number of shoots of a light yellowish green color. Other plants often produced larger shoots, but none on the place nearly as many in number or as much in weight. When cooked it was found to have a rich flavor, unlike and very much superior to any other Asparagus.

Numerous seedlings have been raised from it, and though a certain per cent., as with all other varieties, vary from the original, yet as a large proportion resemble the parent plant in productiveness and especially in quality, this unusual strain is now offered. For home use it is unequaled.

Small yearling plants, per doz., 50c; per hundred, $3.
Seed, per packet, 25c; per ounce, $1.00.

"Under the heading, 'The Prunus Simoni Plum,' in 'The Rural New Yorker' of July 29, page 544, second column, you say: 'We are wondering why crosses with it and the native and Japan plums have not been made.' In Burbank's Catalogue of New Creations, page 4, 1898, you will find that he has been experimenting twelve years in this line, and offers the results of such crosses both there and in the 1899 catalogue."—H. L. Fairchilds, Nichols, Conn.

The Latest Floral Wonder

"SHASTA DAISIES."
(Chrysanthemum Leucanthemum Hybridum)

DURING the past few years when "Shasta Daisies" were being bred and educated up to their present state more admiration has been bestowed upon them by visitors than upon any other flowering plant growing on my grounds, and with good reason, for today no other flower can compare in extent of usefulness. Their first qualification is hardiness. They can be grown out of doors by everybody where it is not cold enough to kill oak trees. Second, they are perennial, blooming better and more abundantly each season. Third, they can be multiplied rapidly by simple division and they are not particular as to soil. Fourth, they bloom for several months—in California nearly all the year. Fifth, the flowers are extremely large and graceful—averaging about a foot—often more—in circumference, with three or more rows of petals of the purest glistening whiteness, on single, strong, stiff, wiry stems, nearly two feet in length. This peculiar grace and remarkable whiteness cannot, of course, be shown on paper. These "Shasta Daisies" should not be confounded with the coarse Chrysanthemum lacustre of the Catalogues or the common "American field daisy."

The "Shasta Daisies" have been produced by first combining the weedy, but free flowering American species with the rather large, but coarse, European species and the Japanese species (Nipponicum), after which rigid selection through a series of years produced the present wonderfully useful and beautiful strain. "Shasta" is only the first of the new type, some of which were for the first time exhibited in the window of a prominent San Francisco florist. Crowds of people visited the establishment to inquire about the latest floral wonder. The blooms when cut remain perfectly fresh and in good condition for two weeks or more. Think, if you can, what other flower possesses all the above qualities. Many new and graceful forms have lately appeared among the "Shasta Daisies" and well marked colors are now appearing in a flower which was never before seen except in white. Some are almost perpetual bloomers and lately some perfectly double ones have appeared.

The *"Shasta"* Daisy at Home

We offer "Shasta" only this season, do not ask for any of the others, unless you may desire to purchase the complete stock and control of some of them. The others will be introduced as soon as sufficient plants to supply customers can be produced. Ready after March 1st. Price, each, $1; five, $3; ten, $5.

"Let not the thougtless imagine for an instant that this magnificent product of floriculture (the "Shasta" Daisy) is the result of brief effort on the part of the producer or merely the work of chance. The product is the result of years of constant effort, nor is that effort now withdrawn."—"Santa Rosa Republican."

New Verbena, Elegance

A STRONG, sweet perfume is the latest and most highly prized addition ever made to the Verbena. Its first appearance was in *"Mayflower,"* which graduated from my grounds six years ago, after a long and careful education. It is now known and grown all over the world.

The new verbena *"ELEGANCE"* surpasses even *"Mayflower"* in fragrance. The plant is vigorous, compact and a perpetual bloomer. The clusters are nearly three inches across and unusually graceful and abundant. Each single floret will cover a silver 25-cent piece; but best of all *"ELEGANCE"* is the *first of a new type* in color plan, having a white center extending fully half across the breadth of the flower, with outer shadings of lavender purple and is as fragrant as a rose. Strong plants, each, 50c; six, $1.50; ten, $2.

Tigridia Grandiflora, New Hybrids John Lewis Childs

"Mexican Tiger or Shell Flower"

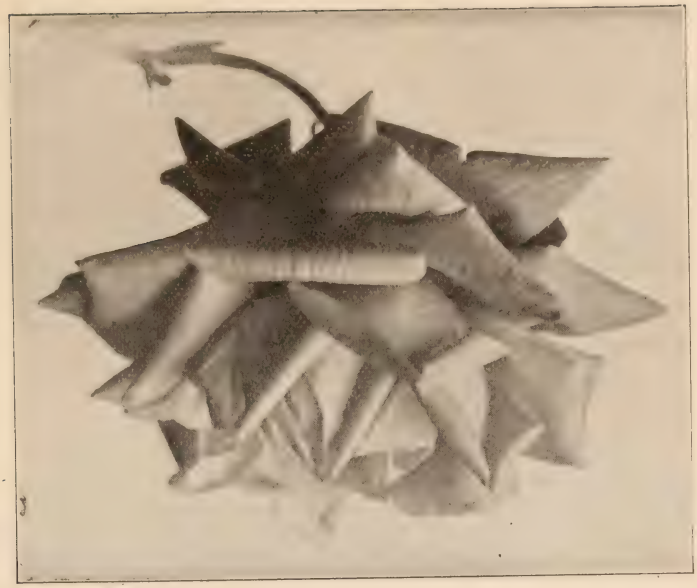
IT is amazing that such a beautiful and easily grown bulbous plant should have been so long overlooked by hybridizers. Until these hybrids were produced the Tigridia was known in a few colors only, even less than the originals of the Gladiolus, and with flowers only four or five inches in diameter.

Among these vigorous giant hybrids, flowers over six inches across may be seen in red, white, yellow, orange, rose, crimson and gold, with shades and color combinations never seen among them before, and as they are as easily grown from seed as the Gladioli and bloom the second season, a new field of delightful work has been opened for enthusiastic flower lovers.

They are now placed in your hands for still higher development, as we have too many other plants on hand to allow further experiment with this, one of the most charming of all bulbous plants and now thoroughly crossed so that even grander new ones may be obtained by growing from the seed of these crossbred varieties. The Tigridia thrives best in a sandy soil, and should be treated in all respects like the Gladiolus.

Bulbs, per ten, 75c; per hundred, $5; per thousand, $40. No seed for sale this season.

"If Mr. Burbank had created nothing except the Burbank potato he would have been one of the greatest benefactors to mankind, and his yearly additions to improved varieties of fruits, vegetables and flowers mark him as one of the most wonderful and beneficent men of the nineteenth century."—"San Jose Mercury."



New Rose, "Coquito"

THE *"Burbank"* Rose which Mr. W. Atlee Burpee of Philadelphia purchased of me has proved to be perfectly hardy at Philadelphia and much further north, and is acknowledged to be the most constant bloomer of any hardy rose known. *"Santa Rosa,"* introduced from my own grounds two years ago, though not yet as widely known, has the same record. Both were Bon Silene Hermosa crosses. *"Coquito"* is another of the same class with larger blossoms and flowers of less pronounced rosy crimson. *"Coquito"* starts to bloom soon after the cutting is rooted and attends strictly to business, whenever the weather permits, blooming in California nearly the whole year. Color clear, deep rose. The foliage of all these new roses remains clean, fresh, glossy and healthy when nearly all others are injured by mildew and various other fungous diseases. One year old bushes from open ground, each, $1; five, $3; ten, $5.

"Burbank Rose.—This is without exception the freest flowering rose in cultivation. The plants begin to bloom when only a few inches high, and flower most profusely all through the spring and summer until stopped by heavy frost late in the autumn. The flowers are double, of fine form, nearly three inches across. The color is a deep rose pink, shading to a beautiful soft rose at the center. The petals are well incurved, so that the center is hidden. In September and October the outer petals change to a deep, rich carmine. The Burbank is perfectly hardy and will stand our most severe weather. This is a great point in its favor. It is strong and vigorous, with neat, rich green foliage, not liable to mould or spot. The plant is of symmetrical form, and does not make sparse open growth out of doors, as do so many other choice varieties. Each plant becomes a well-rounded bush that is most effective when grown at some little distance from other plants."—"Ladies' World."

"The financial gains following the results of Mr. Burbank's experiments and labors are enormous until we pause to calculate the time, work and money expended."

"The consummate skill, the enduring patience, and the immense expenditure of time and money necessary to acomplish what he does is rarely imagined, and perhaps never fully appreciated."—"North American Horticulturist."

PART SECOND

WHOLESALE ONLY

Nothing mentioned on this and the succeeding pages is for sale at retail this season. Not a tree, bud or graft of any of them can be had this season except by the purchase of the whole stock. Enterprising Fruit-growers and Nurserymen will understand the value of the full control of these newest of the new fruits of which none like them are in existence.

IMPROVED BEACH PLUM.

YOU might suppose the above cut represented a Huckleberry branch which had attempted to carry an unusual load, but no! it is a branch three and one-half feet long (reduced about seven times) of our Improved Beach Plum (Prunus maritima), a full size fruit being shown at the lower left-hand corner, and one of the original, wild Beach plums below. The Improved Beach plum is larger than Wayland. The Beach plum is as hardy as about anything that grows and as productive every season as any fruit which mother earth produces, growing on dwarf, compact, bush-like trees. It has heretofore been known as a small, dull colored, bitter fruit fit to eat only when cooked. Our new one grows on a compact, handsome tree enlarged in all respects and the fruit is a beautiful deep purple, dotted white, with a white bloom and is rich and delicious to eat fresh from the tree, not having a trace of the original bitter taste. Flesh deep yellow, freestone, stone of the same size and appearance of a cherry stone. Fruit ripens with the common Beach plum. The trees bloom at the very end of the blooming season, later than any other plum. The Beach plum has long been known to horticulturists to possess rare possibilities and now you have it developed beyond the dreams of the most enthusiastic fruit growers, who will plant them in the warm belt, in the frost belt, in the fertile belt, in the barren belt and produce an abundance of plums where plums would not grow before.

Price for the whole stock and control, $1,000. Grafting wood will be sold this season at $100 per foot, if the whole stock is not purchased by February 15th. No wood delivered until that date.

Common Be
Plum

The "Plumcot"s

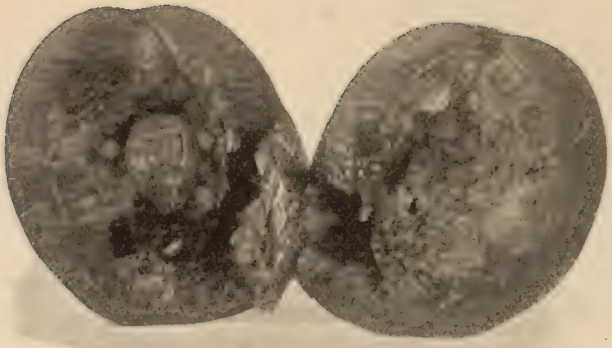
COULD any one imagine a better combination than the Japanese plums and the common Apricots? The combination has been made and our new *Plumcots* are as distinct as if a new fruit had been handed down from another planet.

The general form of most of them is shown above, an opened one below showing the seed and the freestone character of some of the varieties, the one shown above has yellow flesh, some of them have deepest crimson, pink, or white flesh, and are both free and clingstones. All have the general form of an apricot and the same general outside appearance, but often more highly colored than either a plum or an apricot with a skin unique-soft, slightly silky downy with a shadowy bloom. Seed more often resembling a plum pit, but often vice versa. The rich flavors of these fruits are a revelation of new fruit possibilities and are not duplicated by any fruit growing on this planet.

The tree is not quite perfected in some respects, therefore none of them will be introduced until these improvements can be made.

Not for sale this season.

"Your "America" plum is the wonder of my orchard this summer; the foot of grafting wood purchased in 1898 was budded into small Chickasaw stocks, they made good heads next season, 1899, and bore large, extra fine fruit, and again this season bore enormously, two and a half to six bushels per tree and were considered by the hundreds of good judges of fruit who have been here to see them the finest plums they ever saw, they ripen here June 25th to July 20th. I am deeply interested in plums and while all others of the Japanese type rotted very badly and were full of worms, yet among these huge plums there were no defective ones. "America" thrives on hot, dry or heavy clay soil and on high or low lands. It is the plum to set out for profit."—R. Bates, Jackson, S .C.



Stoneless Plums and Prunes

SINCE the plum was first grown nothing more wonderful in its history has occurred than the production of these stoneless fruits, a cut of one of which is shown above. It is a prune; having the general appearance of the common California prune, but growing much larger, not yet educated up to the production of sufficient sugar, but this is only a very small matter compared with results already obtained. The cut above shows one of the new fruits which produces a seed, but no stone. We have a newer one, large, early, sweet and delicious, which bears neither seed or stone. The trees are remarkably vigorous and handsome with silky, downy wood, prominent buds and large, roundish leaves.

Not for sale this season.

"But at any price he is likely to receive for these potent little sticks he will net but an infinitesimal fraction of the millions which this new fruit will eventually profit the world."

"Of the Burbank plums too much cannot be said of the size and beauty and nothing whatever may be said of the taste, for twenty thousand varieties of the same fruit have twenty thousand different tastes, and for lusciousness they are beyond description."—"Santa Rosa Republican."

"The hybrid crabs are a strange and interesting lot. The apple business has been strangely neglected by plant breeders; but some day you or some one else will get the string started and unroll a line of wonders such as is now about to revolutionize the plum business. I was also interested in your "Ironclad" plum."—F. A. Waugh, Burlington, Vt.

"After careful trial we recommend it (Calla "Fragrance") as the sweetest and most beautiful Dwarf Calla lily we have ever seen."—Conard & Jones Co., West Grove, Penn.

"Luther Burbank, that remarkably successful hybridizer, is turning his attention to the production of hardy varieties for the northern States; and it is certainly gratifying to see what fine fruits he is securing."—Prof. F. A. Waugh in "Country Gentleman."

"To discover truth is the best happiness of an individual; to communicate it, the greatest blessing he can bestow upon society."—Townsend.

THIS cut represents a new, second generation combination cross of Hawkeye, Hammer, Milton, Wyant, Wayland and Satsuma. The branches of this variety droop like the Russian Weeping mulberry. The wood is firm, wiry, dark blue—almost black with numerous white dots. The fruit which hangs in amazing profusion on the branches, wreathing them in plums to the ground, is unusually handsome and of the finest quality. The flesh is crimson, pit exceedingly small, skin deep purplish crimson, nearly half covered with large white dots with a white bloom. This promises to be one of the best of the hardy hybrid plums. Price for stock and complete control, $800.

No wood for sale this season.

Your Japan hybrid plums seem, much to my surprise, to be fully as hardy here—100 miles north of Boston—as the Domesticas, and I shall plant an orchard of 1000 of them in the spring."—F. L. Temple, Westminster, Vt.

"On further examination of the American—Satsuma cross I am greatly impressed with it. It is something entirely new—a real novelty. The Americana characters are very striking, in leaf, form of fruit, markings, flavor, stone, etc. But the flesh and texture of the fruit are evidently Satsuma. The stem is anomalous. The whole thing is worthy further study; and I believe the plum cranks would be well pleased to have you introduce this variety next year, if only for the purpose of further breeding experiments. Nevertheless the fine color, and the evidently superior shipping quality of the fruit would make it a candidate for favor as an early shipping fruit. It would probably be superior for canning also. I would rather have scions of this variety for test in Vermont than anything you have yet produced, excepting Wickson and Climax. Don't pass this variety by too hastily. It may not be the sort of a plum that you consider the ideal for California, but it has too much promise for other parts of the country, so far as any one may judge from one or two specimens."—F. A. Waugh, Burlington, Vt."

"The mystery of mysteries is how a new flower or fruit is created. Nothing seems simpler while Luther Burbank tells you in his clear, choice language and with his singularly boyish smile, of the agencies and methods he employs to accomplish his miracles. But fancy any one copying his directions and then attempting to produce therefrom an apple or a plum, a rose or a lily, such as never before came to perfection under the sun."—H. R. P. T. for S. F. "Call."

On the beautiful Statue of Victory in the Missouri Botanical Gardens is the following inscription: "The victory of science over ignorance. Ignorance is the curse of God. Knowledge the wing wherewith we fly to heaven."

Photograph of a cluster of one of more than ten thousand hybrid lilies produced on my grounds and mentioned in New Creations for 1894. The best have been selected and are now being propagated as fast as possible. One of the inferior ones, but a good lily was unfortunately sent out two years ago as "the Burbank Lily" without consulting the party most interested in the name.

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